MTR -900C
MTR -800C

CarHiFi Receiver

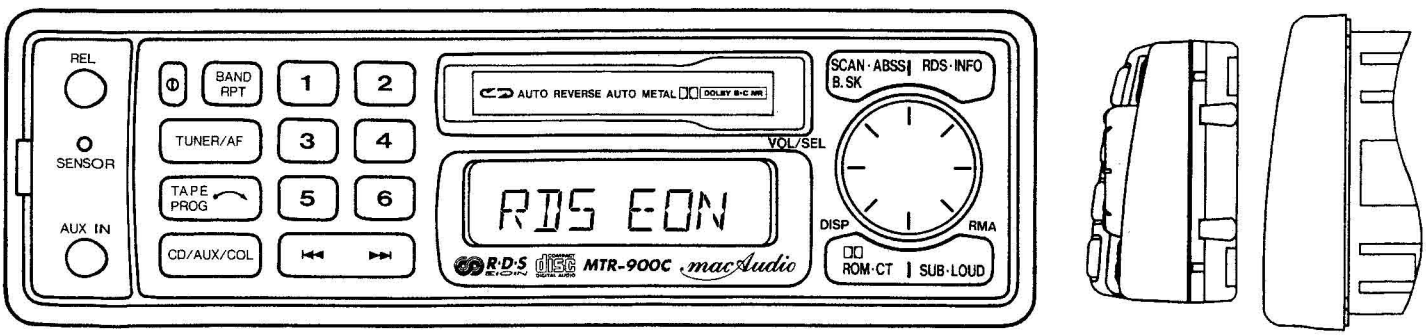
RDS-Receiver mit Cassettendeck und CD-Wechsler- Steuerung

RDS-Receiver with Cassette Deck and CD Changer Control Function

Récepteur RDS avec lecteur de cassette et commande de lecteur de CD à changeur

Sintoamplificatore RDS con piastra a cassette e funzione di controllo cambia-CD

SERVICE-MANUAL



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macAudio
FASCINATING SOUND

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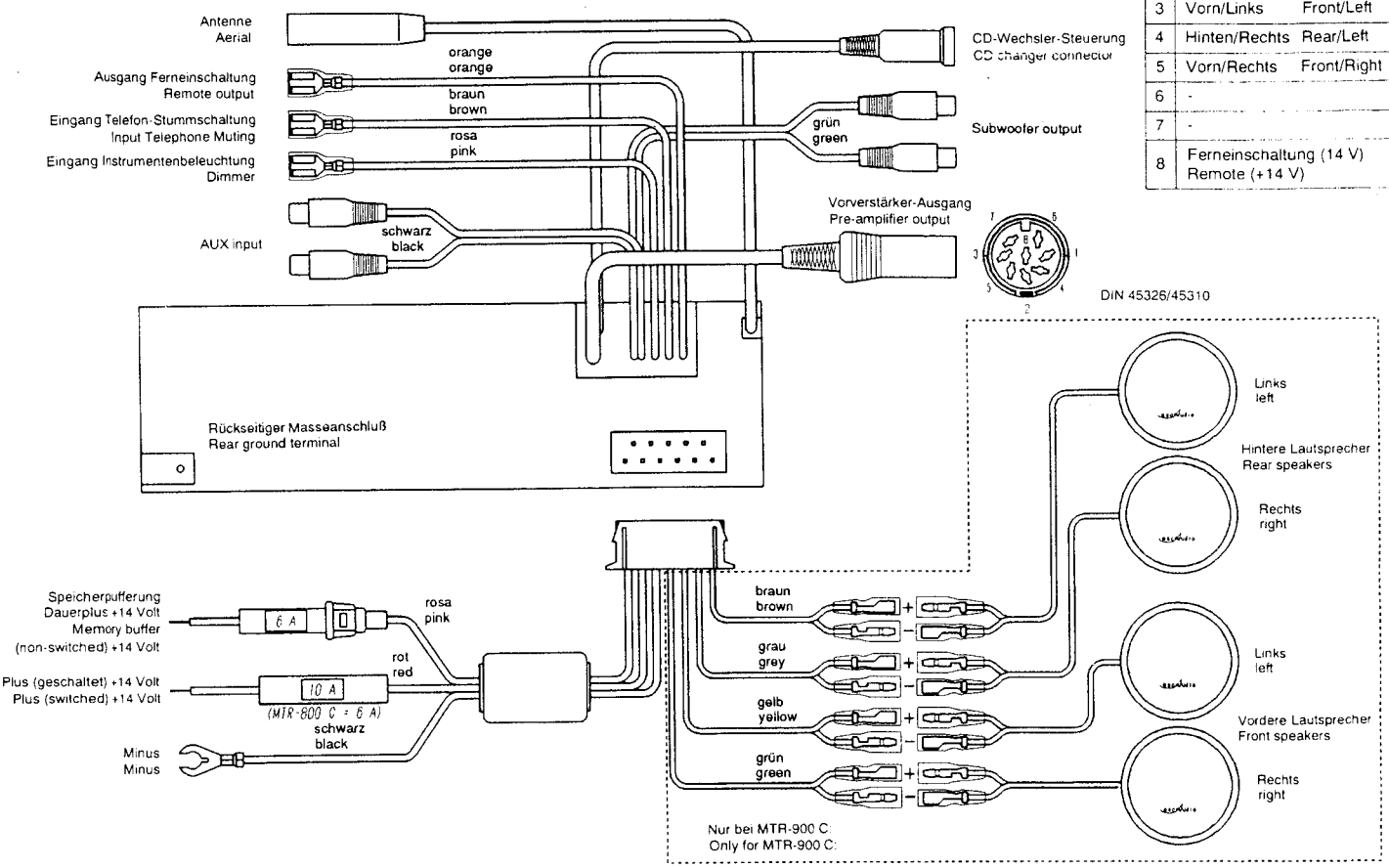
1. CONNECTION

1	Hinten/Links	Rear/Left
2	Minus	Ground
3	Vorn/Links	Front/Left
4	Hinten/Rechts	Rear/Left
5	Vorn/Rechts	Front/Right
6	-	
7	-	
8	Ferneinschaltung (14 V) Remote (+14 V)	



1.1 OPERATION

TUNER-BETRIEB

Folgende Funktionen sind verfügbar:

DRUCK / TASTE	KURZ	0,5-2 SEKUNDEN	> 2 SEKUNDEN
MUTE (Gerät aus) ⏻ (Gerät läuft)	Gerät EIN STUMM-SCHALTUNG		GERÄT AUS
BAND RPT	Empfangsband-Wahl FM1-FM2-FM3-AM		STEREO-/MONO-Umschaltung
TUNER♦AF	TUNERBETRIEB SCAN AUS		AF REG→AF →OFF
TAPE♦PROG♦ EJECT (⏏)	CASSETTEN-BETRIEB		CASS.-AUSWURF
CD♦AUX♦COL	CD-BETRIEB	AUX -BETRIEB	FARBUM-SCHALTUNG
1-2-3-4-5-6	FESTSENDER-Aufruf		PROGRAMMIE-RUNG
⏮ ⏭	SUCHLAUF SCHRITTWEISE abwärts/aufwärts	SUCHLAUF AUTOMATISCH abwärts/aufwärts	SUCHLAUF AUTOMATISCH AB BETÄTIGUNGS-ENDE
SCAN♦ABSS B.SK	SENDER-SCAN	FESTSENDER-SCAN	AUTOMATISCHE BEST-SENDER-SPEICHERUNG
RDS♦INFO	INFO Verkehrsfunk	PTY 31 Warndurchsage	EON Ein/Aus
DISP DOLBY DD RDM♦CT (RanDoM) (Clock Time)	ANZEIGE EMPFANGS-FREQUENZ	ANZEIGE UHRZEIT	
RMA SUB♦LOUD (Radio Monitor Aktivierung) (SUBwooferpegel) (LOUDness)	SUBWOOFER-AUSGANG PEGELWAHL Niedrig-Mittel-Maximal	LOUDNESS EIN/AUS	

TUNER OPERATION

Folllowing functions are available:

PUSH / BUTTON	SHORT	0.5-2 SECONDS	> 2 SECONDS
MUTE (Unit off) ⏻ (Unit on)	UNIT ON MUTING		UNIT OFF
BAND RPT	RECEPTION BAND FM1-FM2-FM3-AM		STEREO-/MONO-selection
TUNER♦AF	TUNER OPERATION SCAN OFF		AF REG→AF →OFF
TAPE♦PROG♦ EJECT (⏏)	CASSETTE OPERATION		CASS.-EJECT
CD♦AUX♦COL	CD OPERATION	AUX OPERATION	COLOUR SELECT
1-2-3-4-5-6	PRESET CALL		PRESET PROGRAM
⏮ ⏭	SEARCH STEPWISE down/up	SEEK AUTOMATICALLY down/up	SEEK AUTOM. FROM LAST PUSH FREQUENCY
SCAN♦ABSS B.SK	STATION-SCAN	PRESET-SCAN	AUTOMATIC BEST STATION MEMORY
RDS♦INFO	INFO Traffic Ann.	PTY 31 Danger Ann.	EON On/Off
DISP DOLBY DD RDM♦CT (RanDoM) (Clock Time)	DISPLAY RECEPTION FREQUENCY	DISPLAY CLOCK TIME	
RMA SUB♦LOUD (Radio Monitor Activation) (SUBwoofer level) (LOUDness)	SUBWOOFER OUTPUT LEVEL CONTROL Minimum-Medium-Maximum	LOUDNESS ON/OFF	

CASSETTEN-BETRIEB

Folgende Funktionen sind verfügbar:

DRUCK / TASTE	KURZ	0,5-2 SEKUNDEN	> 2 SEKUNDEN
MUTE (Gerät aus) ⏻ (Gerät läuft)	Gerät EIN STUMMSCHALTUNG/PAUSE		GERÄT AUS
BAND RPT			TITEL-WIEDERHOLUNG
TUNER♦AF	TUNERBETRIEB	TUNERKONTROLL-FUNKTION	
TAPE♦PROG♦ EJECT (⏜)	CASSETTENBETRIEB STOP UMSPULEN	Wiedergabeseite A/B	CASSETTEN-AUSWURF
CD♦AUX♦COL	CD-BETRIEB	AUX-BETRIEB	FARBUMSCHALTUNG
1-2-3-4-5-6	MUSIK-SUCHLAUF Sprungzahl		
⏮ ⏭	VOR-/RÜCKSPULEN STARTMUSIK-SUCHLAUF		
SCAN♦ABSS B.SK (Blank SKip)	ANSPIEL-SUCHLAUF		LEERSTELLEN-ÜBERSPRING-AUTOMATIK
RDS♦INFO	INFO Verkehrsfunk	PTY 31 Warndurchsage	EON Ein/Aus
DISP DOLBY RDM♦CT (RanDoM) (Clock Time)	RAUSCHUNTERDRÜCKUNG Dolby B - Dolby C - Aus	ANZEIGE Uhrzeit	
RMA SUB♦LOUD (Radio Monitor Aktivierung) (SUBwooferpegel) (LOUDness)	SUBWOOFER-AUSGANG PEGELWAHL Niedrig-Mittel-Maximal	LOUDNESS EIN/AUS	RADIO MONITOR AKTIVIERUNG während Vor-/Rückspulen

TAPE OPERATION

Following functions are available:

PUSH / BUTTON	SHORT	0.5-2 SECONDS	> 2 SECONDS
MUTE (Unit off) ⏻ (Unit on)	UNIT ON MUTING		UNIT OFF
BAND RPT	TRACK REPEAT		
TUNER♦AF	TUNER OPERATION	TUNER CONTROL FUNCTION MODE	
TAPE♦PROG♦ EJECT (⏜)	CASSETTE OPERATION STOP WINDING	PLAYBACK SIDE A/B	CASS.-EJECT
CD♦AUX♦COL	CD OPERATION	AUX OPERATION	COLOUR SELECT
1-2-3-4-5-6	MULTI MUSIC SEARCH Skip Number		
⏮ ⏭	FAST REWIND FAST WIND FORWARD MMS Skip Start		
SCAN♦ABSS B.SK(Blank SKip)	TAPE PROGRAM SCAN		BLANK SKIP
RDS♦INFO	INFO Traffic Ann.	PTY 31 Danger Ann.	EON On/Off
DISP DOLBY RDM♦CT (RanDoM) (Clock Time)	NOISE REDUCTION Dolby B - Dolby C - Off	DISPLAY CLOCK TIME	
RMA SUB♦LOUD (Radio Monitor Activation) (SUBwooferlevel) (LOUDness)	SUBWOOFER OUTPUT LEVEL CONTROL Minimum-Medium-Maximum	LOUDNESS ON/OFF	RADIO MONITOR ACTIVATION during fast winding times

CD-WECHSLER STEUER-BETRIEB

Folgende Funktionen sind verfügbar:

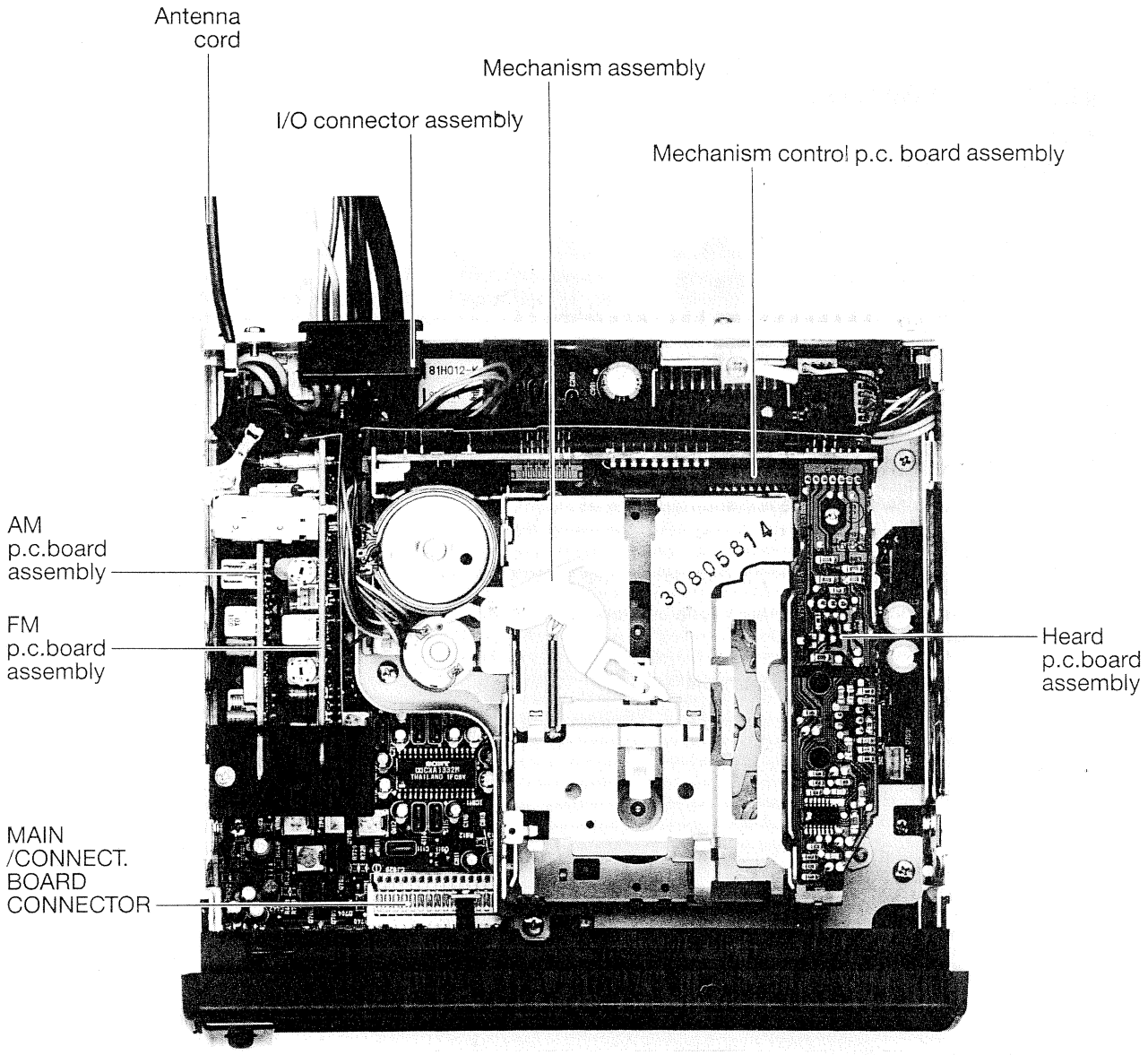
DRUCK / TASTE	KURZ	0,5-2 SEKUNDEN	> 2 SEKUNDEN
MUTE (Gerät aus) ⏻ (Gerät läuft)	Gerät EIN STUMMSCHALTUNG		GERÄT AUS
BAND RPT	WIEDERHOLUNG 1=Titel 2=CD		
TUNER♦AF	TUNERBETRIEB	TUNER KONTROLL-FUNKTION	
TAPE♦PROG♦ EJECT (⏜)	CASSETTEN-BETRIEB		CASS.-AUSWURF
CD♦AUX♦COL	CD-BETRIEB	AUX-BETRIEB	FARBUMSCHALTUNG
1-2-3-4-5-6		CD-DIREKT-ZUGRIFF	
⏮ ⏭	TITEL-ZUGRIFF vorheriger/nächster Beginn	SUCHLAUFFUNKTION rückwärts/vorwärts (reduzierter Pegel)	
SCAN♦ABSS B.SK (Blank SKip)	ANSPIEL-SUCHLAUF 1=Anspielen Track 2=Anspielen CD Aus		
RDS♦INFO	INFO Verkehrsfunk	PTY 31 Warndurchsage	EON Ein/Aus
DISP DOLBY RDM♦CT (RanDoM) (Clock Time)	ZUFALLS-WIEDERGABE 1=aus CD 2=aus Magazin Aus	ANZEIGE UHRZEIT	
RMA SUB♦LOUD (Radio Monitor Aktivierung) (SUBwooferpegel) (LOUDness)	SUBWOOFER-AUSGANG PEGELWAHL Niedrig-Mittel-Maximal	LOUDNESS EIN/AUS	RADIO MONITOR AKTIVIERUNG während CD-Ladevorgang

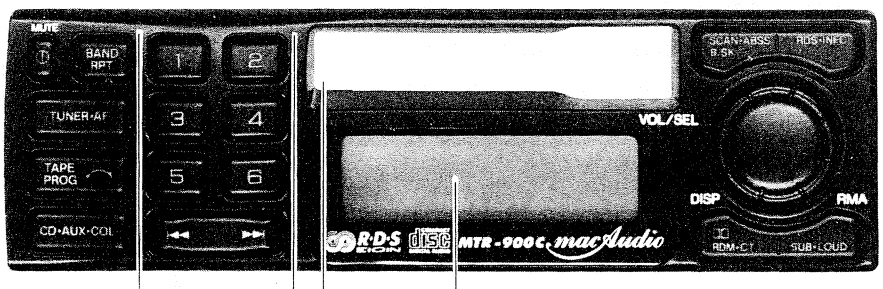
CD CHANGER OPERATION

Following functions are available:

PUSH / BUTTON	SHORT	0.5-2 SECONDS	>2 SECONDS
MUTE (Unit off) ⏻ (Unit on)	UNIT ON MUTING		UNIT OFF
BAND RPT	TRACK REPEAT		
TUNER♦AF	TUNER OPERATION	TUNER CONTROL FUNCTION MODE	
TAPE♦PROG♦ EJECT (⏜)	CASSETTE OPERATION		CASS.-EJECT
CD♦AUX♦COL	CD OPERATION	AUX OPERATION	COLOUR SELECT
1-2-3-4-5-6		CD DIRECT ACCESS	
⏮ ⏭	SKIP previous/ next track	TRACK SEARCH backwards/forward (reduced listening level)	
SCAN♦ABSS B.SK(Blank SKip)	SCAN FUNCTIONS 1=Track Scan 2=CD Scan Off		
RDS♦INFO	INFO Traffic Ann.	PTY 31 Danger Ann.	EON On/Off
DISP DOLBY RDM♦CT (RanDoM) (Clock Time)	RANDOM FUNCTION 1=out of the CD 2= out of the magazine OFF	DISPLAY CLOCK TIME	
RMA SUB♦LOUD (Radio Monitor Activation) (SUBwoofer level) LOUDness)	SUBWOOFER OUTPUT LEVEL CONTROL Minimum-Medium-Maximum	LOUDNESS ON/OFF	RADIO MONITOR ACTIVATION during CD loading times

2. LOCATION OF MAIN PARTS





CONTROL UNIT

LCD window

Preset button

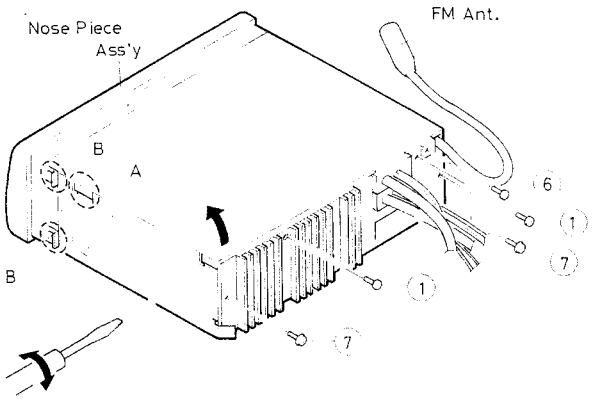
Cassette tape window

2.1 REMOVAL OF MAIN PARTS

■ Enclosure Section

◆ Top Cover

1. Remove the two screws ① retaining the top cover from backward.
2. By inserting a screw driver, etc. into the ⇨ mark section on the left and right sides, tune the screw driver and keep the top cover afloat from the chassis. Next, remove the two claws on the top cover and chassis engagement section A.



◆ Nose Piece assembly

1. Remove the four claws B on the left and right side of the nose piece assembly.
2. Dismount the nose piece assembly by pulling it straight. Meanwhile, the nose piece assembly will be connected to the main p.c.board on the left side of the control unit.

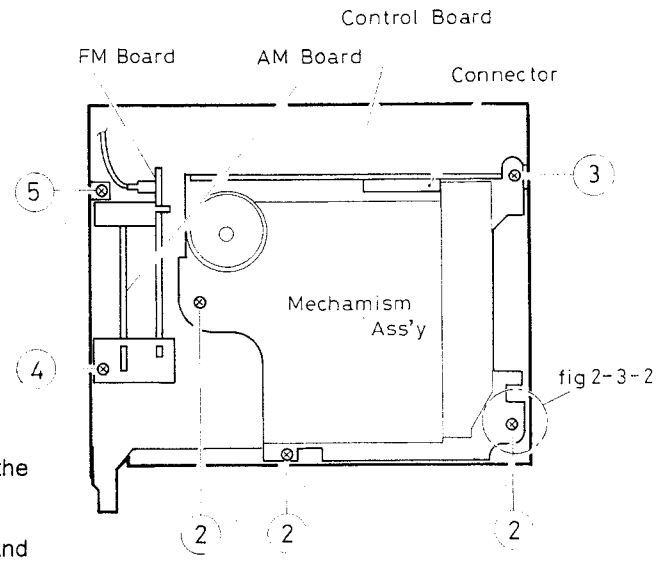
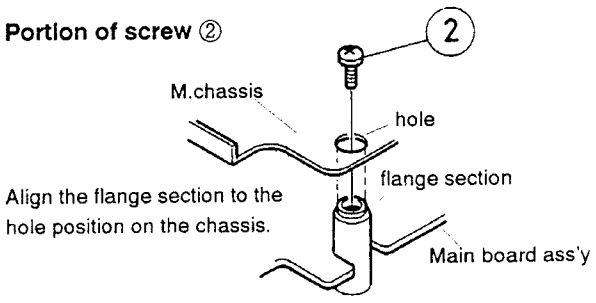


fig 2-3-2

◆ Mechanism assembly

1. Remove the four screws ② and ③ retaining the mechanism assembly.
2. Raise the mechanism assembly straight upward, and remove the control p.c.board connector. Then, the mechanism assembly/control unit can be dismounted.



◆Tuner board assembly

1. Remove the one screw ④ retaining the tuner board holder.

●FM tuner board assembly

1. Remove the one screw ⑤ retaining the FM tuner pack.

2 Remove the antenna connector from the FM - tuner board.

3. Dismount the tuner board by pulling it straight upward.

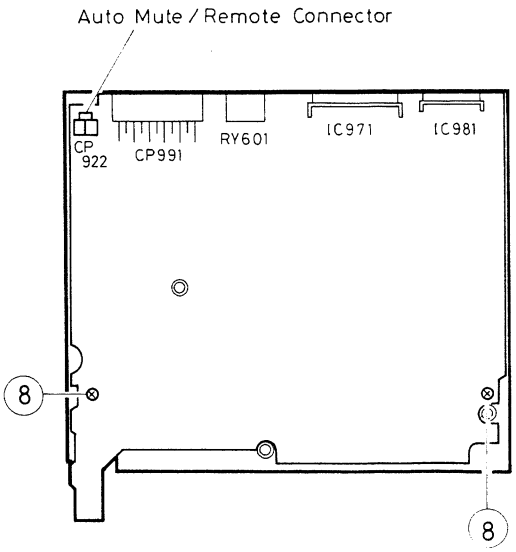
●AM tuner bord assembly

1. Dismount the tuner board by pulling it straight upward.

◆main board assembly (with rear panel)

1. Remove the two screws ⑦ retaining the rear panel.

2. Remove the two screws ⑧ retaining the main board. Then ,the main board can be dismounted.



2.2 MECHANISM SECTION

■ Mechanism section

- Dismount the mechanism unit from the chassis.
- Refer to the mechanism disassembly diagram at the same time.

◆ Change of head(see Fig. 2 – 6~Fig. 2 – 8)

1. Remove the one screw ① retaing the push switch bracket.
2. Pull out the head wire from the connector.
3. After raising the push switch bracket from the retaining screw side, pull out and remove the p.c.board connector CJ882from CP882.
4. Remove the two screws ②retaining the head.

Assenbly method (Reverse the mechanism mode)

1. Insert the rear side of the push switch bracket into the chassis hole (In case the p.c.board is attached thereto, align the bracket position while connecting the connectors (CP882 and CJ882).
2. When the mechanism mode has been set to the FOWARD mode,confirm the connect between the push switch of p.c.board and switch lever at first, and then align the screw portion ① to assembly the front side of the push switch bracket. At the hole section of screw ① assembly the claw of push switch bracket and the chassis.

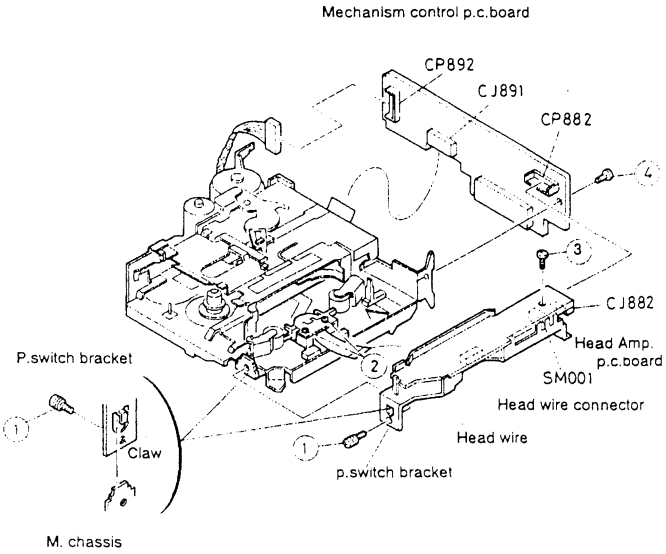


Fig.2-6

◆ Head amp. p.c.board assembly(see Fig. 2 – 6)

1 Remove the one screw ③ retaining the head amp. p.c.board.

2. Remove the soldering of the push switch (SM001).

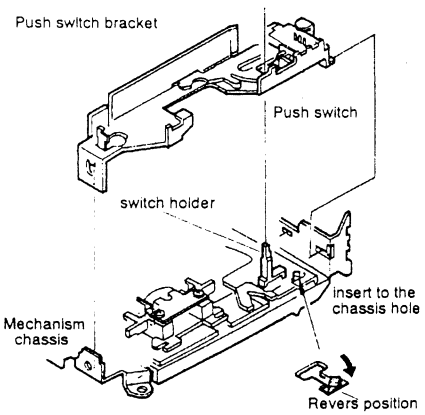


Fig.2-7

◆ Mechanism control p.c.board assembly

(see Fig. 2 – 6)

1. remove the one screw ④retaining the mechanism control p.c.board.
2. Raise the p.c.board from the head side and remove the connector CJ891
3. Remove the motor wire connector CP892.

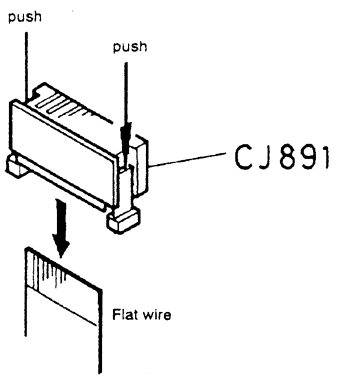


Fig. 2-8

◆ mechanism bracket and main belt

(see Fig.2 – 9, Fig.2 – 10)

1. Remove the four screws ④ retaining the mechanism bracket.
2. Remove the main belt.

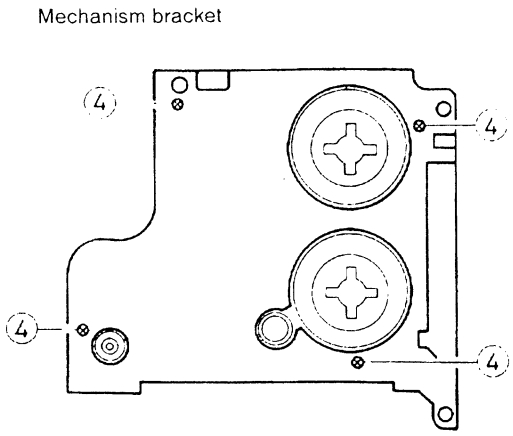


Fig. 2-9

◆ Main and sub motor assembly(Fig.2 – 11)

● Main motor

1. Remove the two screws ⑤ retaining the main motor (The wire holder should also be removed as necessary).

● Sub motor

1. Insert a minus (–)screw driver into the lower side of the gear B and pull the gear out vertically (it is recommended to replace the gear B with a new one).
2. Remove the two screws ⑥ retaining the sub motor.

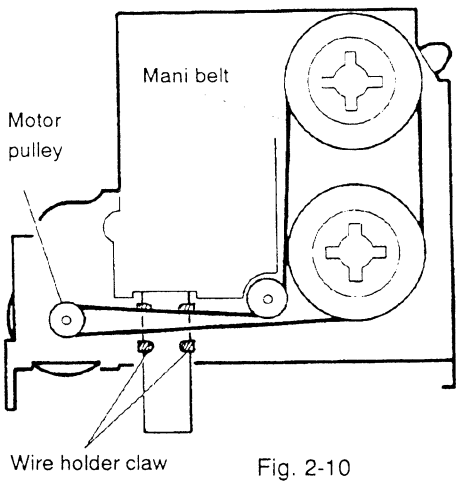


Fig. 2-10

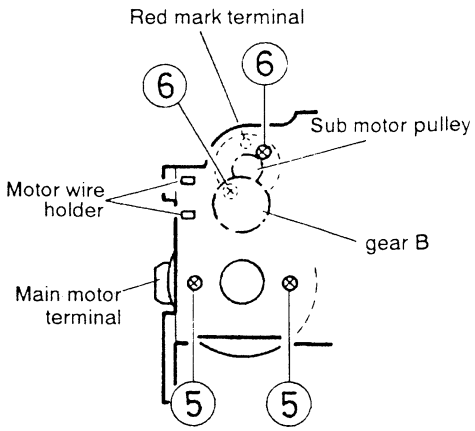


Fig. 2-11

◆MG plate assembly (see Fig. 2 – 13, Fig. 2 – 14)

1. Remove the C wacher ⑧ retaining the middle pulley of the main belt (Although the washer should not necessarily be removed,it will be easier to perform the next step when removed).
2. Remove the four screws ⑨ retaining the MG plate assembly.
3. Dismount the holder with flat wire .
4. Dismount the MG plate asseembly.

Assembly method

1. Attach the gear D to the MG plate
2. When inserting the MG plate assembly into the lower plate of the flywheel after setting the plate assembly diagonally, insert the FR plate assembly gear into the key way of the FR gear guide(Combination (25) and (57) in the overhaul/disassembly diagram).

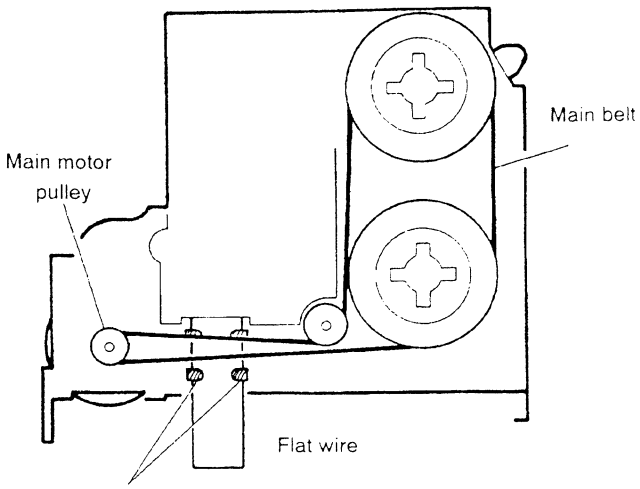


Fig. 2-13

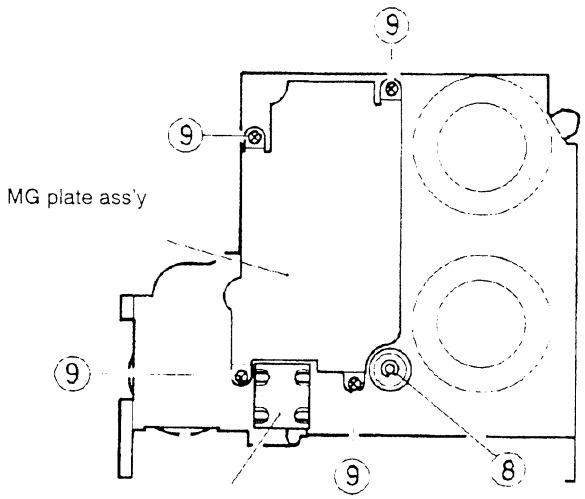


Fig. 2-14-1

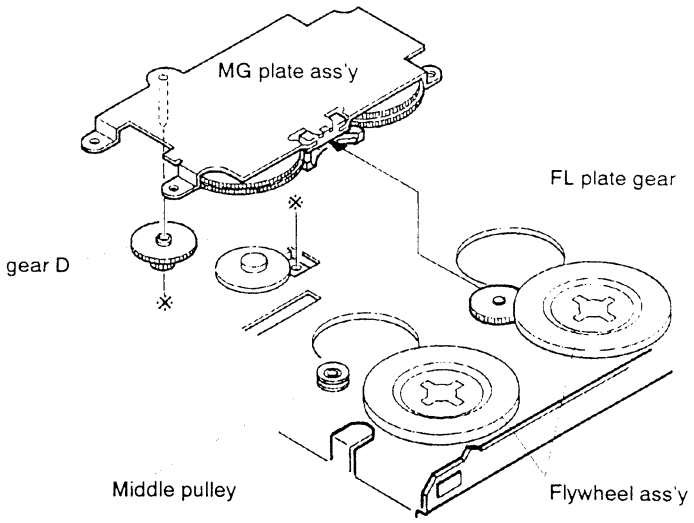


Fig. 2-14-2

◆Cassette case assembly

1. Align the lever on the left side of cassette case to the position of the u-graduation.(see Fig. 2 – 11 – 3)
2. Remove the one screw ⑦ retaining as a hold on the rear side of the cassette case.(see Fig. 2 – 12)
3. Remove the rear side of the cassette case from the shaft, and dismount the casstte case assembly.
   (see Fig. 2 – 11 – 1,Fig. 2 – 11 – 2)

★By moving the graduation lever under this condition, it is possible to confirm the action of the pinch roller and head.

(1) Set the graduation lever to the position P. Then the pinch roller will be crimped, and the head be locked under the PLAY condition after moving foward.

(2) When the graduation lever is positioned between D and EJ, the cassette case will be in action.

Assembly method (see Fig. 2 – 11, Fig. 2 – 12)

1. Set the left side graduation lever to the position U.
2. Mount the cassette case assembly from th e motor side and preform X,Y connection / assembly (At this time ,it is easy to align the position by moving thr graduation lever back and forth between U and D).
3. Push the PS actuator toward the rear side so that the shaft of the loading plate be engaged with the U-form key way of the PS actuator.
4. After aligning the cassette case hole to the convex on the chassis, fix the screw ⑦. Then, make sure that the graduation lever moves smoothly between EJ and P (The chassis will function as a stopper).
5. Make sure that the graduation lever move smoothly between EJ and P.

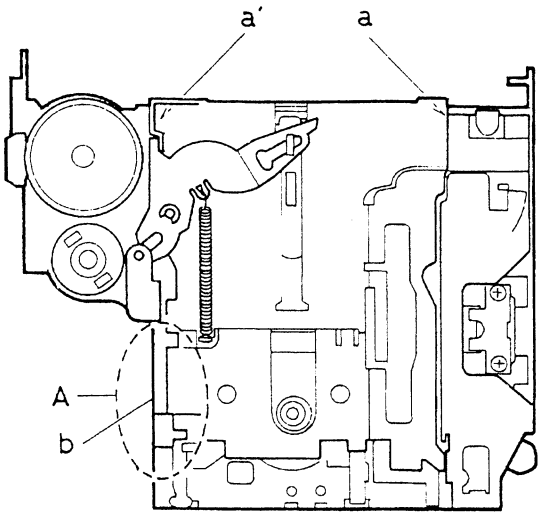


Fig. 2-11-1

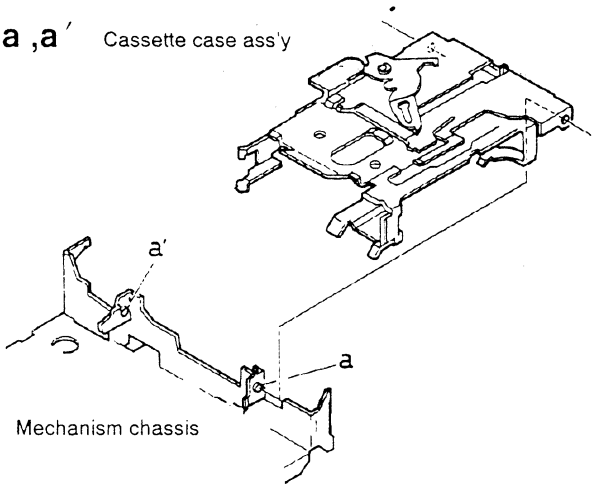


Fig. 2-11-2

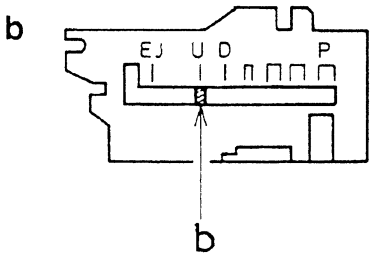


Fig. 2-11-3

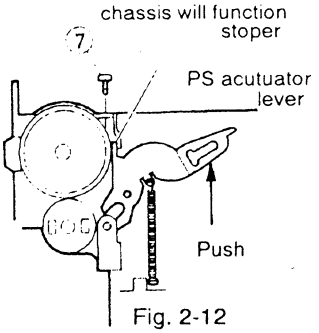


Fig. 2-12

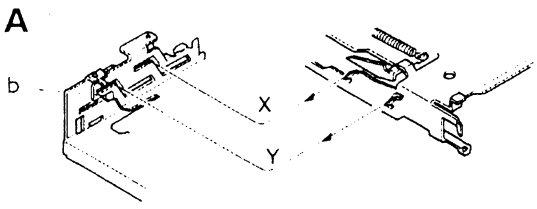


Fig. 2-11-4

3. MAIN ADJUSTMENTS

3.1 Equipment and measuring instruments used for adjustments

Measuring Instruments

- Electronic Voltmeter
- Audio Frequency Oszillator
- Attenuator (impedance 600 Ohm)
- Wow- and Flutter-Meter
- Frequency Counter
- AM Standard Signal Generator
- RDS-FM Signal Generator

Test Tape

Torque testing Cassette gauge
- mechanical adjustment (e.g. CTG-N)
- FWD-play (e.g. TW-2111A)
- REW-play (e.g. TW-2121A)

Standard Tape
- Head azimuth (e.g. VTT-704)
- Tape Speed; Wow/Flutter (VTT-712)
- Reference level (e.g. VTT-724)
- Frequency response (e.g. VTT-739)
- Output level (e.g. VTT-721)

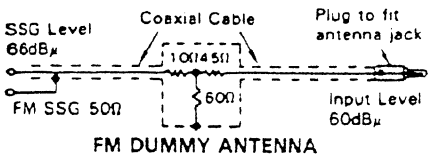
3.2 Condition for measurement

Power Supply . . . DC 14.4 Volt (reduced 10.5 Volt)
Speaker Load . . . 4 Ohm
Reference Output . 500 mV
Bass/Treble/Fader . Center Position
Volume . . . . . Output 2.5 Volt during VTT-724 playback

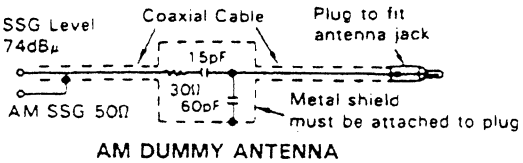
Setting of Reference Frequency

FM: . . . . . 400 Hz, 22.5 kHz deviation
FM Stereo: . . . . 1 kHz, 67.5 kHz deviation, pilot signal 7.5 kHz
AM: . . . . . 4oo Hz, 30% modulation
Reference Output . FM: 66 dBµV, 97,9 MHz; AM: 74 dBµV, 999 kHz
Output impedance SSG 50 Ohm (use antenna dummy as specified)

DUMMY LOADS: Use the special dummy loads for both FM and AM. However, there is a loss of 6 dB between the SSG output and antenna input when the FM dummy is used. In this service manual this 6 dbB loss is ignored and the SSG values are used are direct readings.



FM DUMMY ANTENNA

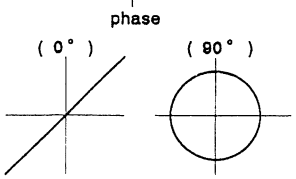
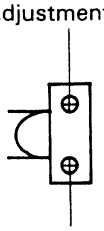


AM DUMMY ANTENNA

Preset Memory Initialization

Band	Preset Memory					
	M1	M2	M3	M4	M5	M6
FM/MHz	87.5	89.9	97.9	105.9	107.9	87.5
AM/kHz	144	153	522	603	1404	1620

■ Tape section adjustment

Item	Conditions	Adjustment and Confirmation	Standard Value	Adjusting
1. Head azimuth adjustment	Test tape: VTT704(12.5 kHz)	★ In case the head and its height have been changed, it will be necessary to adjust the height of the head. 1. By travelling the tape while the head P.C. board bracket has been dismounted, adjust the height of the head so that the tape travels along the center of the guide tape. 2. While playing back VTT704, adjust the output waveforms with the screw attached to the head so that both the L and R waveforms become maximum. 3. After adjusting the head, check the tape travelling to make sure that there is no curl at the guide section. 4. Subsequent to adjustment of the tape height and check of tape travelling, play back VTT704 again, and adjust the head azimuth and waveform phases. The phase difference should be within 90° at the maximum output. At this time, the phase should be adjusted with only one of the screws. 5. After adjustment, coat the screws with the screw lock bond.	Maximum output Maximum output phase difference: Within 90° 	Rough and adjustment  Rough and fine adjustment
2. Tape speed and wow flutter confirmation	Test tape: VTT714 (3kHz)	1. Check to see if the reading of the F. counter /wow flutter meter is within 3015 ~ 3045 (FWD/REV), and less than 0.35% (JIS RMS). 2. In case of out of specification, adjust the motor with a built-in volume resistor.	Tape speed: 3015 ~ 3045Hz Wow flutter: less than 0.35%	Built-in volume resistor
3. Playback frequency response confirmation	Test tape: VTT724 (1kHz) VTT739 (63Hz/1kHz/10kHz) TMT735 (1K/12.5kHz)	1. Play test tape VTT724, and set the volume position at 2.5 V 2. When the test tapes VTT736 and TMT735, the output level deviation should be within 12.5kHz/6kHz: +1±3dB. 3. When 12.5kHz is out of specification, it will be necessary to read adjust the azimuth.	Speaker out 1kHz/63Hz : 0±3dB 1kHz /12.5kHz :1±38dB	
4. Maximum output power confirmation	Test tape: VTT721 (1kHz) volume: maximum BASS/TRE: center FADER: center	1. Confirm the rear output be more than 8,5V (18W). 2. Confirm the front output be more than 8,5V (18W). 3. Confirm that consumption current at above condition to be less than 5A. 4. Sound leakage should not occur at volume minimum. 5. Oscillation should not occur at BASS/TRE at maximum. When the test tape VTT721 is played back after setting the VR to a maximum level, the line output level should be 350 ~ 700mV.	Output level: move than 18W (8,5V) Consumption current: less than 5A	

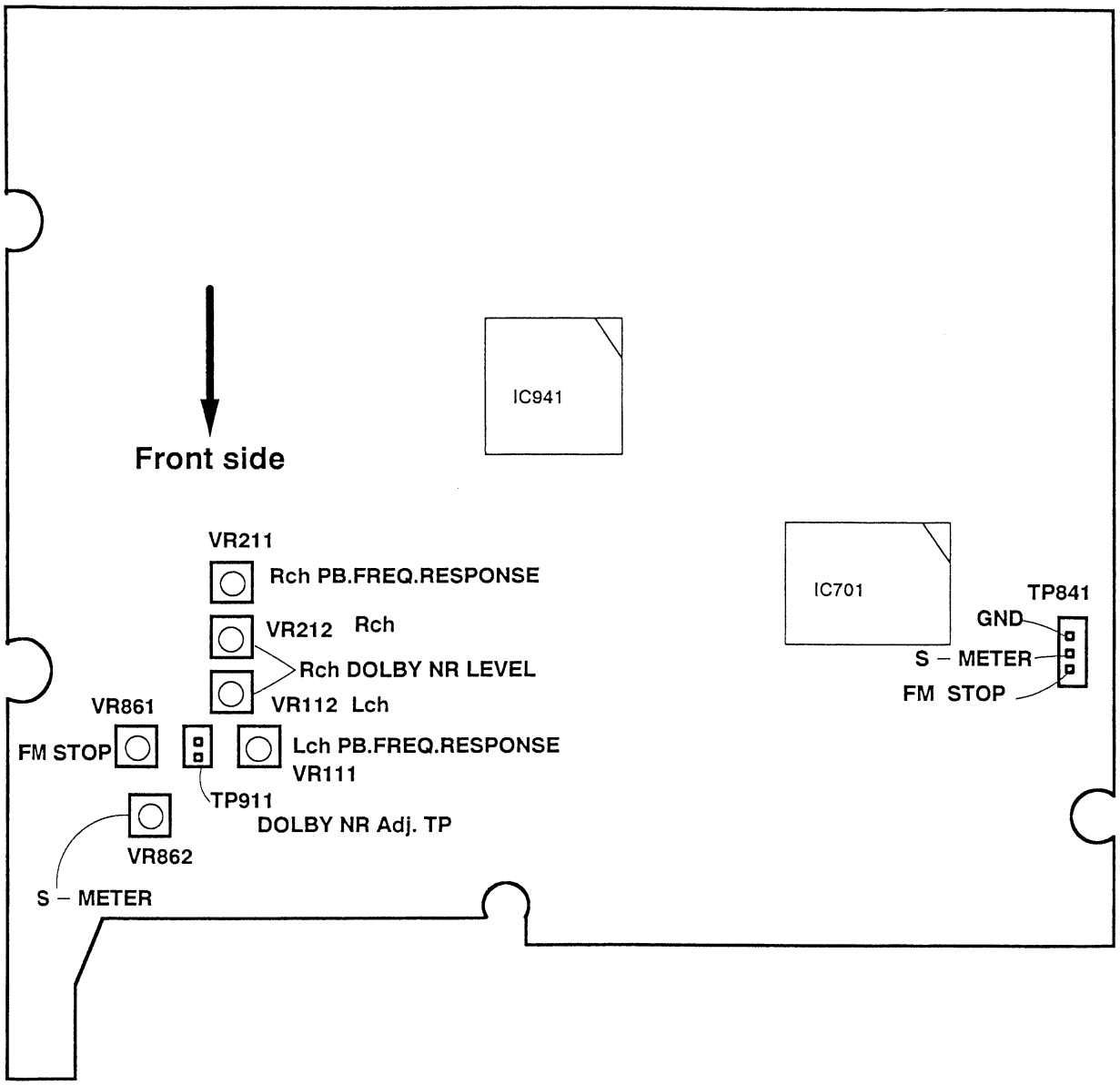
Item	Conditions	Adjustment and Confirmation	Standard Value	Adjusting
5. DOLBY NR level adj.	Test tape: VTT724 (1kHz) TMT735 (1kHz/ 12,5 kHz Test point: TP911	1. Playback the test tape VTT724. Adjust VR112/VR212 so that the output level at terminal TP911 is 318mV. 2. Playback the non-signal recorded portion and turn on and off the DOLBY switch repeatedly while making sure that level difference at TP911 is 8.5dB more. 3. Playback the test tape VTT735. Adjust VT111/VR211 so that the deviation of the output level of 1kHz and 12.5kHz is within 0.5dB. 4. Repeat the Dolby NR level adjustment and the frequency response adjustment until sufficient result is obtained.	DOLBY B/C 318mV	Lch: VR112 Rch: VR212 Lch: VR111 Rch: VR211
6. Playback noise level	Vacant cassette tape	When a vacant cassette tape is travelled (played back) after setting the VR to the minimum level, the speaker output noise level is 2mV or less. The current consumed at this time should be 2 A or less.	2mV or less	

Item	Conditions	Adjustment and Confirmation	Standard Value	Adjusting
1. Radio/Tape level difference	AM 100kHz, 1kHz, 30% modulation, 74dBμ	Against VTT724, the output difference level to be within – 1 ± 3dB (G/GE)	Within – 1 ± 3dB (G/GE)	
2. FM 0V adjustment	Test point: TP1 FM97.9MHz, 66dB non-modulation	Adjust L3 so that the TP1 DC voltage level become 0V when 97.9MHz is indicated.	0 ± 10mV	L3
3. FM seek stop adjustment	Test point: TPP841 (3 pin) FM97.99MHz 30dBμ (non-modulated)	Adjust VR861 so that SD is set exactly from 0V to 5V with SSG 97.9MHz 26dBμ V.	0V to 5V	VR 861
4. Separation adjustment	Test point: AF out FM97.9MHz 66dBμ stereo signal (1kHz 67.5kHz Dev. 5.7kHz Dev.)	1. Firstly, turn the VR3 fully in counterclockwise direction. 2. Next, make ready to receive reference stereohonic modulation input, and adjust VR1 so that the Lch output become smollest. At this time, the ST indicator in LCD will be turned on. then, press the MONO button and confirm that the ST indicator in LCD is turned off and MONO signal is output. 3. Make ready to receive the reference stereophonic modulation input of 52dB and adjust the output with VR3 so that the separation becomes 17dB.	Lch output: minimum	VR3 VR1
5. S-meter adjustment	Test point: TP841 (2 pin) GND (1 pin)	Adjust VR862 so that the TP841 (2 pin) voltage level become 910±50mV	910mV±50mV	VR862

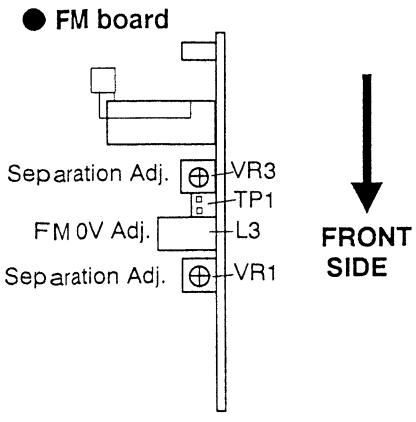
Item	Conditions	Adjustment and Confirmation	Standard Value	Adjusting
6. A-HBS confirmation	FM97.9MHz, 66dBμ 100Hz modulation 67.5kHz dev.	1. After applying 97.9MHz 100Hz modulation 66dBμV, press the A-HBS button (continuously until the button has been turned on completely). With the volume, adjust the speaker output to a level free from clipping. 2. Confirm that the output level when the A-HBS button has been turned off is 8 ~ 14dB or less.	down level 8 ~ 14dB	
7. Inter-channel muting		Confirm that the difference of the output level is within 20 ± 10dB when the SSG output level has been changed from 66dB over to 19dB under the reference input receiving conditions.		

Item	Conditions	Adjustment and Confirmation	Standard Value	Adjusting
1. AM voltage Adjustment	Test point: TP	1. Set the frequency of the receiver to 144kHz and adjust the coil L55 so that the digital tester reading is in the standard value.	2.5V ± 0.1V	L55
2. AM tracking adjustment	Test point: AF out	1. Tuner to 522kHz and observe the speaker out. Adjust in the sequence T51→T52→T53 repeatedly so that the waveform is maximum. 2. After completion of adjustment, confirm that the TP2 output is 7.5 V or less while receiving 1,620kHz.	Waveform maximum 7.5 V or less	T51 T52 T53

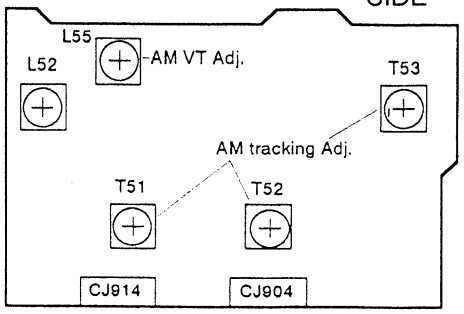
Adjusting point



● FM board

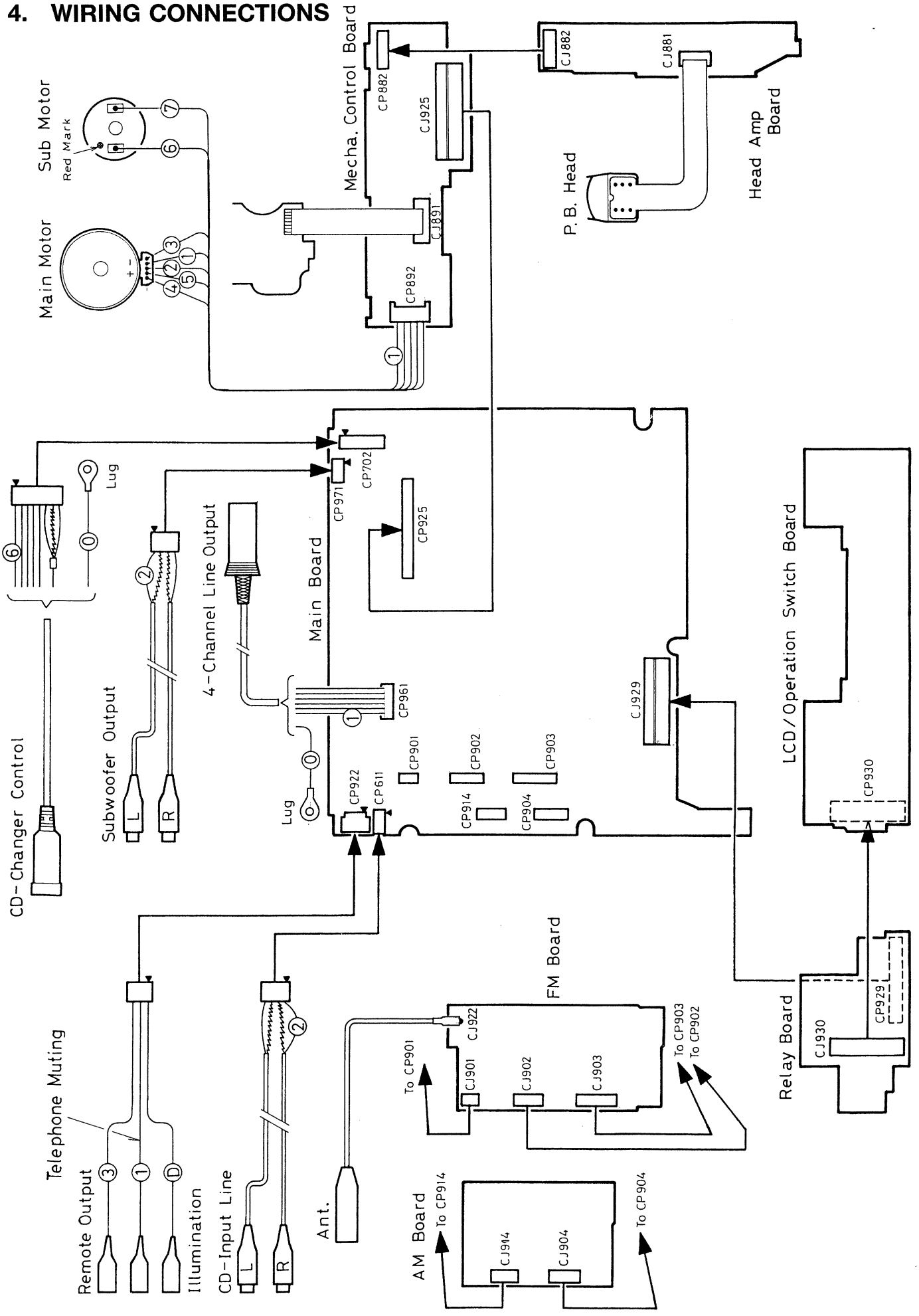


◆ AM board → FRONT SIDE

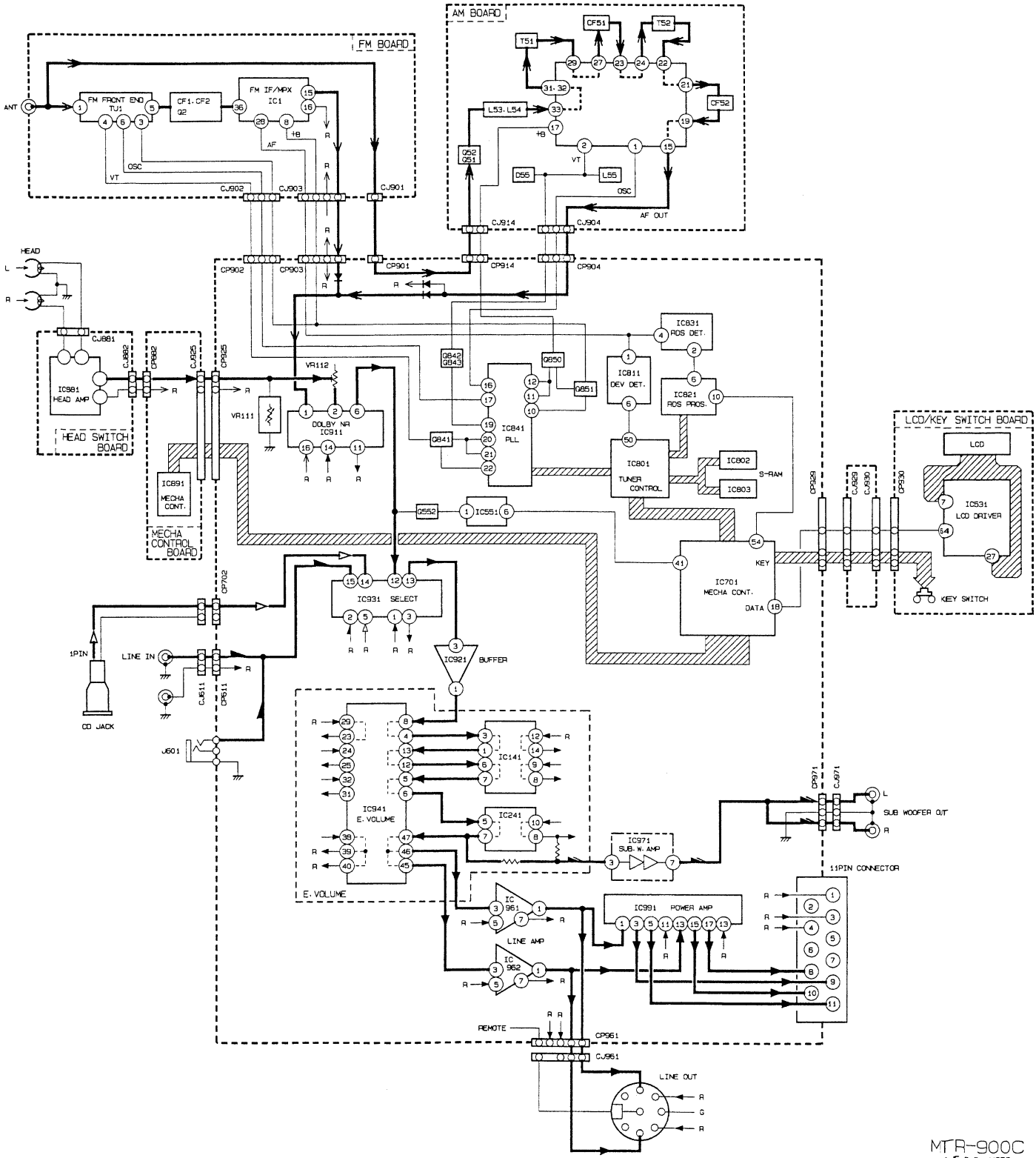


TP

4. WIRING CONNECTIONS

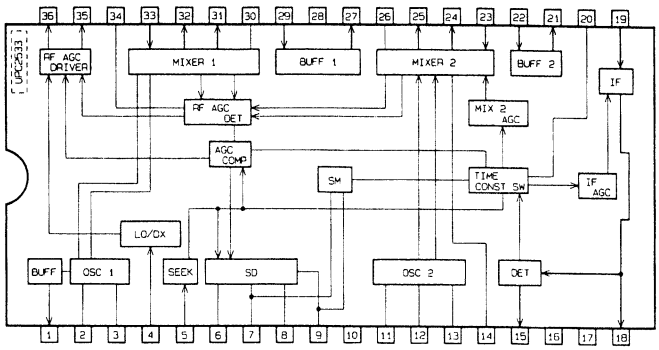


5. BLOCK DIAGRAM

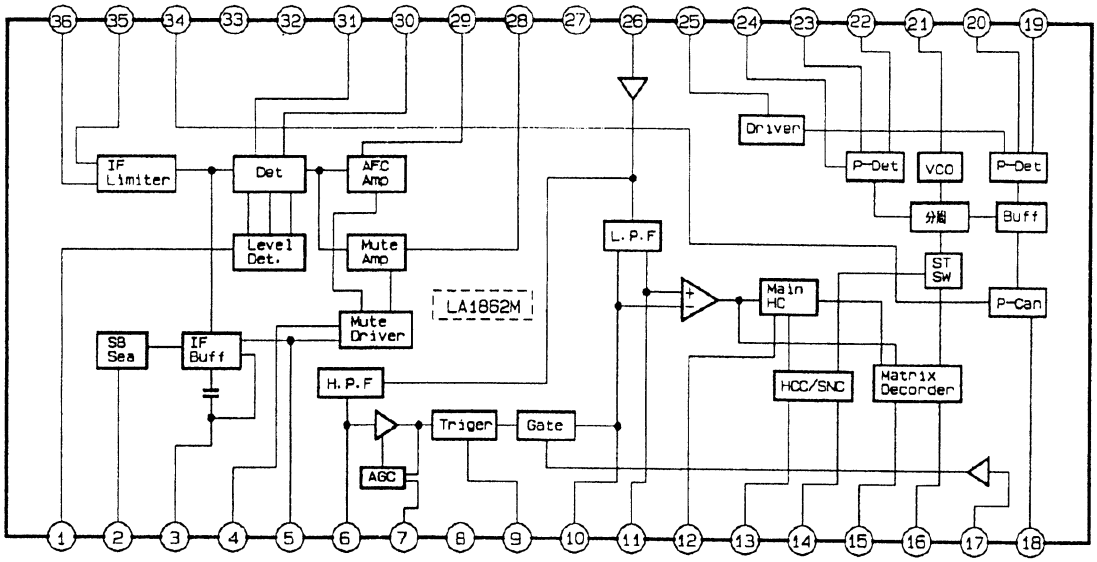


5.1 IC DIAGRAMM

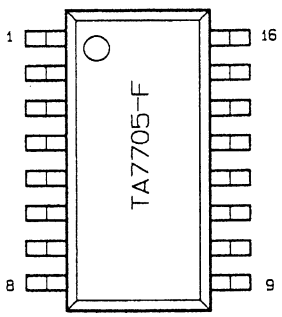
◆ UPC2533 (IC51)

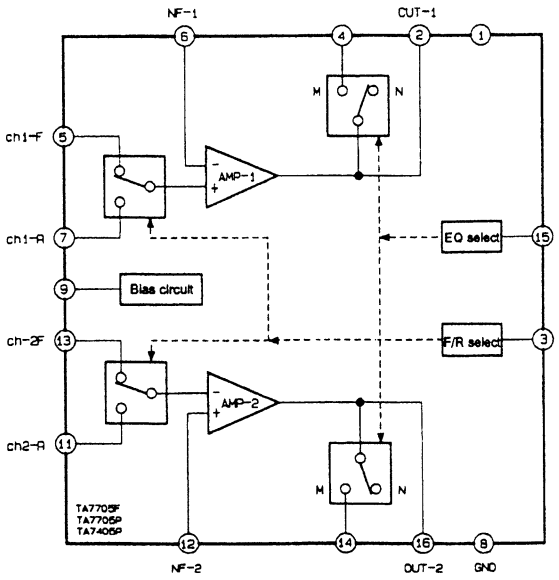


◆ LA1862M (IC1)

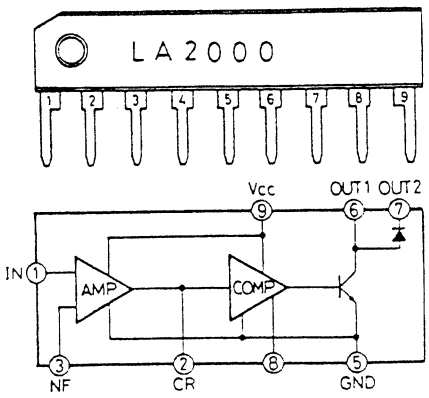


◆ TA7705F (IC881)

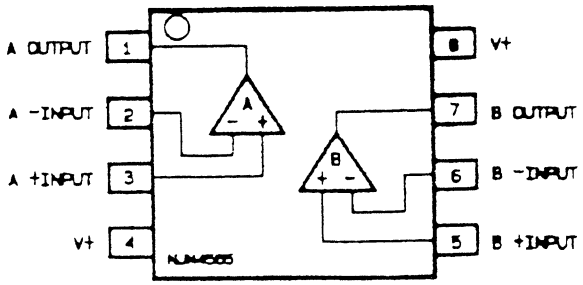




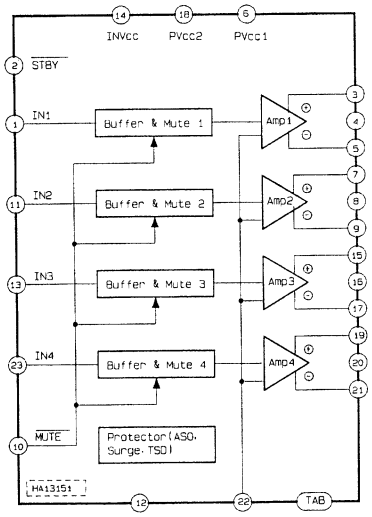
◆ LA2000S (IC551, IC811)



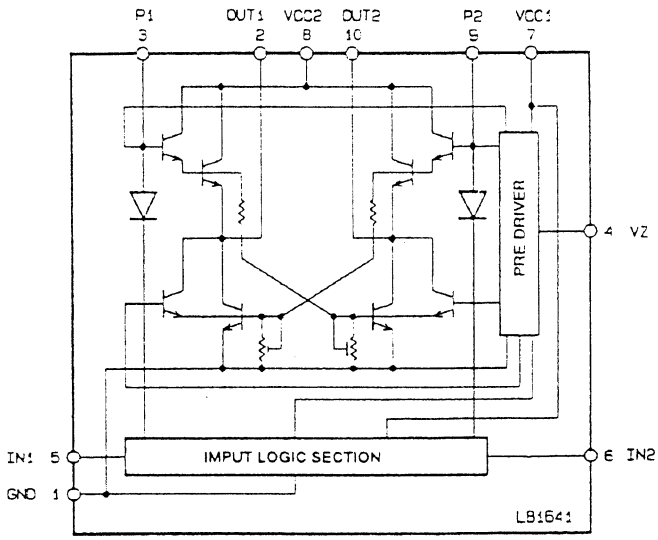
◆ NJM4565M (IC601, IC611, IC971, IC921, IC942, IC961)

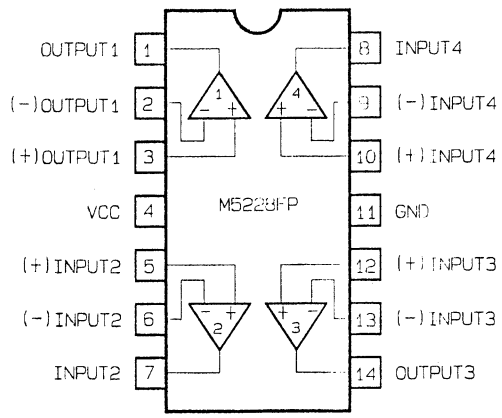


HA 13151

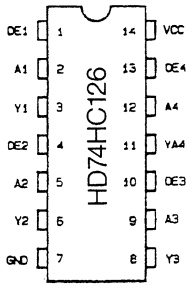


◆ LB1641 (IC891)





◆ HD74HC126FP (IC702)



Terminal Description

UPD-75517G

No.	Port Name	I/O	Active	Standby	Description of Use
1	—	I	—	—	NC
2	Vref	I	—	—	A/D converter analog reference voltage input port (to be connected to 5 V)
3	V_{DD}	—	—	—	Connect to 5 V.
4		—	—	—	Connect to 5 V.
5	MOD4	I	H	—	Mode switch
6	MOD3	I	H	—	↓
7	MOD2	I	H	—	↓
8	MOD1	I	H	—	↓
9	ILLUMI	O	L	L	ILLMI selection output
10	HBS	O	H	L	HBS ON signal
11	FF/REW	O	H	L	"H" output at tape FF/REW
12	SHIFT	O	H	L	"H" output at SHIFT mode
13	S.MOTOR +	O	H	L	Sub motor output
14	S.MOTER −	O	H	L	↓
15	M.MOTER +	O	H	L	Main motor output
16	M.MOTER −	O	H	L	↓
17	NC	I	—	—	
18	SO	O	H	L	LCD electronic VOL. serial communication output port
19	SCK	O	L	L	LCD electronic VOL. serial communication clock
20	CEL MUTE	I	L	—	Connected to 5 V
21	NC	O	—	L	
22	RADIO	O	L	L	L at radio output (Tape/radio selector)
23	MUTE	O	L	L	Muting output
24	I/O	O	—	L	Buffer selection output: H; selection input: L for bus communication
25	BUS IN	I	L	—	Connect to [BUS OUT] of changer
26	PACKEX	I	L	—	Tape mechanism detector switch input
27	F/RSW	I	—	—	↓
28	NC	I	L	—	Connected to GND
29	K3	I	L	—	Initializing input port
30	K2	I	L	—	↓
31	K1	I	L	—	↓
32	K0	I	L	—	↓
33	GND	—	—	—	GND
34	KS5	O	L	H	Initializing output port
35	KS4	O	L	H	↓
36	KS3	O	L	H	↓
37	KS2	O	L	H	↓
38	KS1	O	L	H	↓
39	KS0	O	L	H	↓
40	NC	I	—	—	Connected to GND
41	MS IN	I	H	—	Music scanning input H: with station; L: without station
42	TONE	O	H	L	Confirmation output
43	E.VOL CE	O	H	L	Electronic VOL. CE output
44	NC	O	—	L	NC
45	DISP CE	O	H	L	CE output for indicator IC and LC75850
46	MEMORY	I	H	—	Memory power supply detection
47	ON	I	H	—	Interlocked to power switch of the set (L: Backup)

No.	Port Name	I/O	Active	Standby	Description of Use
48	INT	I	↗	—	Interruption to detect the start of bus communication (connected to SCK)
49	NC	I	—	—	Connected to GND
50	SI	I	H	—	Special serial communication input terminal for bus
51	SO	I	H	—	Special serial communication output terminal for bus
52	CD SCK	O	L	H	Special serial communication clock for bus
53	TEST	I	H	—	[TEST] input
54		—	—	—	GND
55		I	—	—	Connect to GND.
56		—	—	—	NC
57		I	—	—	Connect to GND.
58		I	—	—	X' TAL = 4.192 MHz
59		—	—	—	↓
60	RESET	I	L	—	[RESET] terminal
61	DOLBY	O	H	L	DOLBY selection output
62		—	—	—	NC
63	RADIO	O	H	L	Radio/Tape selection output
64	LED-A	O	L	H	"L" at AUX.
65	NC	O	—	L	
66	SEL	O	H	L	[FUNCTION] selection output
67	ON	O	L	H	Power supply control output
68	LED. R	O	H	L	"L" at radio mode
69	LED. T	O	H	L	"L" at tape mode
70	LED. C	O	H	L	"L" at CD changer mode
71	NC	O	—	L	NC
72	NC	O	—	L	NC
73	AGND	—	—	—	GND
74	F. REEL	I	H	—	Reel table turning input
75	R. REEL	I	H	—	↓
76	KEY4	I	H	—	Momentary key input
77	NC	I	—	—	GND
78	KEY3	I	H	—	Momentary key input
79	KEY2	I	H	—	↓
80	KEY1	I	H	—	↓

Allocation of Ports

UPD78013 Tuner Microprocessor

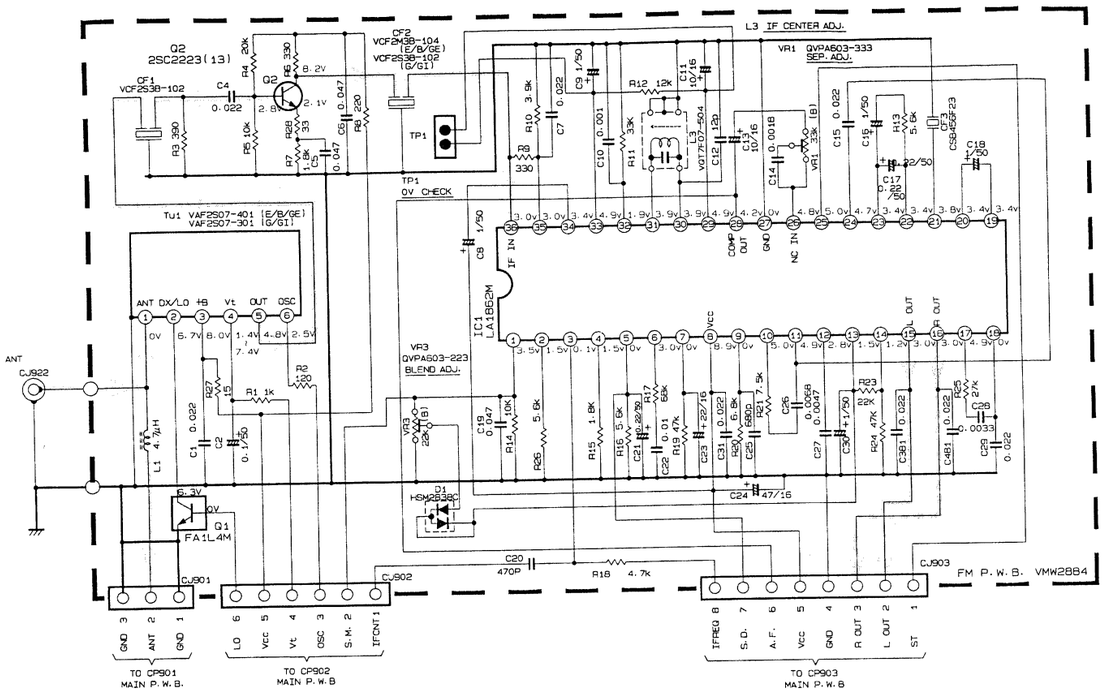
Pin No.	I/O	Name of terminal	Active	Function
1	O	I/O SEL	H	BUS I/O selection output. H: Output; I: Input
2	O	ALARM	H	Alarm output (900 Hz)
3	O	PLL CLK	H	Clock output to PLL LC72140.
4	O	PLL DO	H	Data output to PLL LC72140.
5	O	SM CHECK	H(PU)	Check signal of S. meter.
6	O	PLL CE	H	[CHIP ENABLE] output to PLL LC72140.
7	I	$\overline{\text{UP CON}}$	L(PU)	Initializing [UP CON] selection input. [UP CON] at "L"
8	O	AF CHECK	H	Time constant selection output. "H" is output at the time of frequency change.
9	—	Vss	—	
10	O	A/D 0	H	Address data output
11	O	A/D 1	H	Address data output
12	O	A/D 2	H	Address data output
13	O	A/D 3	H	Address data output
14	O	A/D 4	H	Address data output
15	O	A/D 5	H	Address data output
16	O	A/D 6	H	Address data output
17	O	A/D 7	H	Address data output
18	O	A 8	H	Address output
19	O	A 9	H	Address output
20	P	A 10	H	Address output
21	O	NC	H	
22	I	$\overline{\text{HIDEAWAY}}$	L(PU)	Initializing [HIDEAWAY] selection input. H: Built-in specification; L: Hideaway specification.
23	I	SET SEL	L(PU)	Set specification selection input at initializing in the case of built-in specification. H: Cassett receiver; L: CD receiver
24		Vss		
25	I	FM IFC	L	FM IF count selection input at initializing H: SD only; L: Combined use of IF count
26	I	AM IFC	L	AM IF count selection input at initializing H: SD only; L: Combined use of IF count
27	O	CEOUT	L	[CHIP ENABLE] output for RAM. #36 PIN input is reversed and output.
28	I	PLL DO		Serial data input from PLL
29	O	$\overline{\text{TP MUTE}}$	L	[TAPE MUTE] output. "L" is output when any station other than traffic information station at the time of traffic information mode.
30	O	$\overline{\text{MUTE}}$	L	[MUTE] output. "L" is output druing muting.
31	O	$\overline{\text{OE}}$	L	OE signal output of S. RAM.
32	O	$\overline{\text{WE}}$	L	WE signal output of S. RAM.
33	I	NC(VDD)		
34	O	ASTB	H	Strobe signal output of S. RAM.
35	I	$\overline{\text{RESET}}$	L	Reset input.
36	I	NC		
37	I	$\overline{\text{CE}}$	L	[CHIP ENABLE] input of microcomputer. The microcomputer will be in normal action at "L".
38	I	BUS INT	H	J-BUS interruption input.
39	I	$\overline{\text{RDSSTB}}$	H	Strobe input of RDS decorder.
40		Vdd	—	
41		X2	—	Oscillation frequency: 8 MHz.
42		X1	—	
43		NC	—	

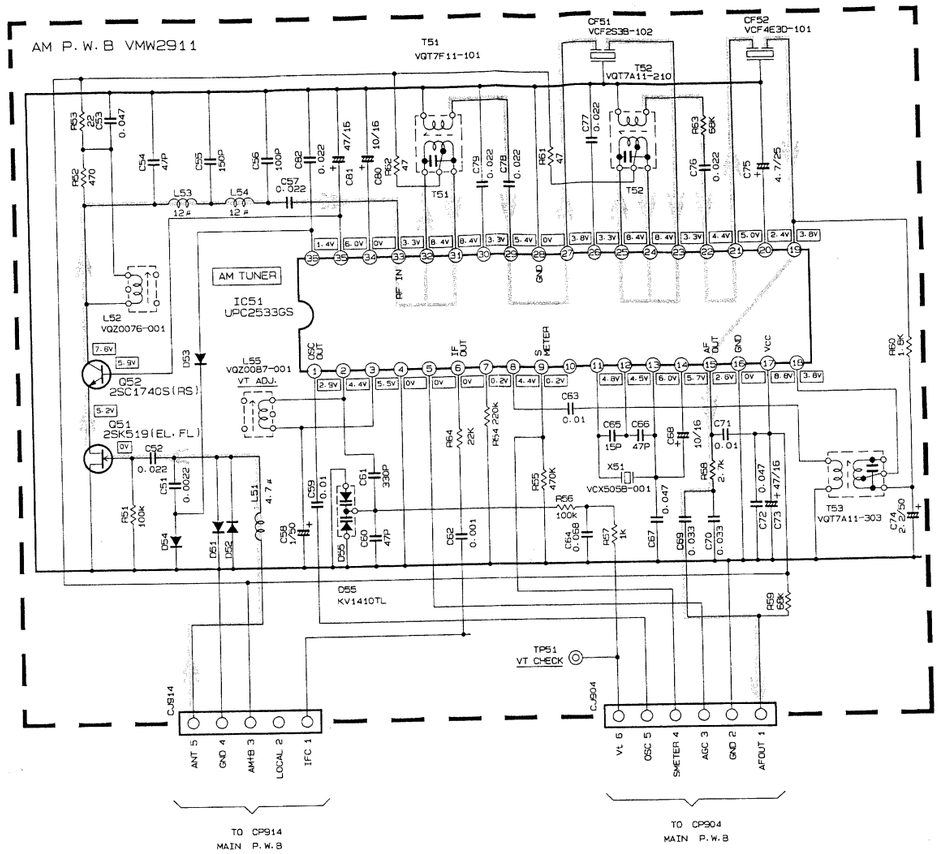
Pin No.	I/O	Name of terminal	Active	Function
44		NC	—	
45		Vss	—	
46		Vss	—	
47	I	S METER	H	Signal meter input. The voltage proportional roughly to the signal intensity will be input.
48	I	S QUAL	H	Signal grade input. The voltage proportional roughly to the signal receiving conditions will be input.
49	I	SD	H	SD input.
50	I	DEV	H(PU)	Modulation or no modulation input. "H" with modulation.
51	I	$\overline{ST}$	L(PU)	Input of "L" at ST broadcasting.
52	I	$\overline{SK}$	L(PU)	SK or no SK signal input. "L" with SK.
53	I	$\overline{DK}$	L(PU)	DK or no DK signal input "L" with DK.
54	I	$\overline{RDS}$	L(PU)	RDS or no RDS signal input. "L" with RDS.
55		Vdd	—	
56		Vdd	—	
57	I	SI1	H	Data from RDS decoder.
58	O	SO1 (NC)	H	
59	I	SCK1	H	Clock input from RDS decoder.
60	O	$\overline{MONO}$	L	Forced [MONO] output. "L" at [MONO] mode.
61	O	$\overline{RES\ CNT}$	L	Reset output to RDS decoder.
62	I	JBUS SI	H	Data input to J-BUS.
63	O	JBUS SO	H	Data input from J-BUS.
64	I/O	JBUS SCK	H	Clock input of J-BUS.

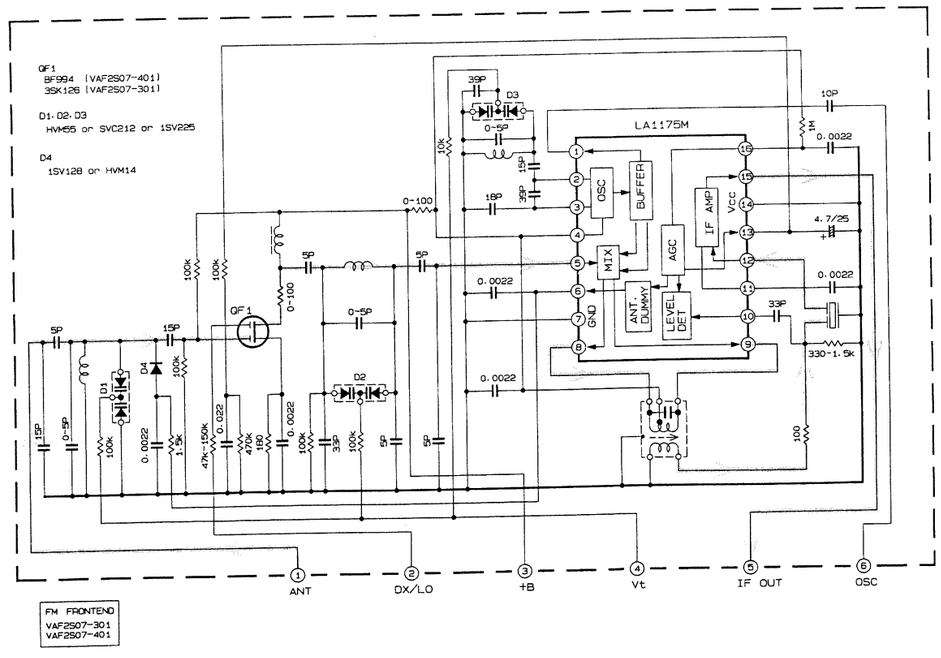
Note: [PU] of the active level should be initialized by pulling up the software.

6. STANDARD SCHEMATIC DIAGRAM

6.1 TUNER CIRCUIT

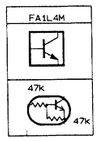




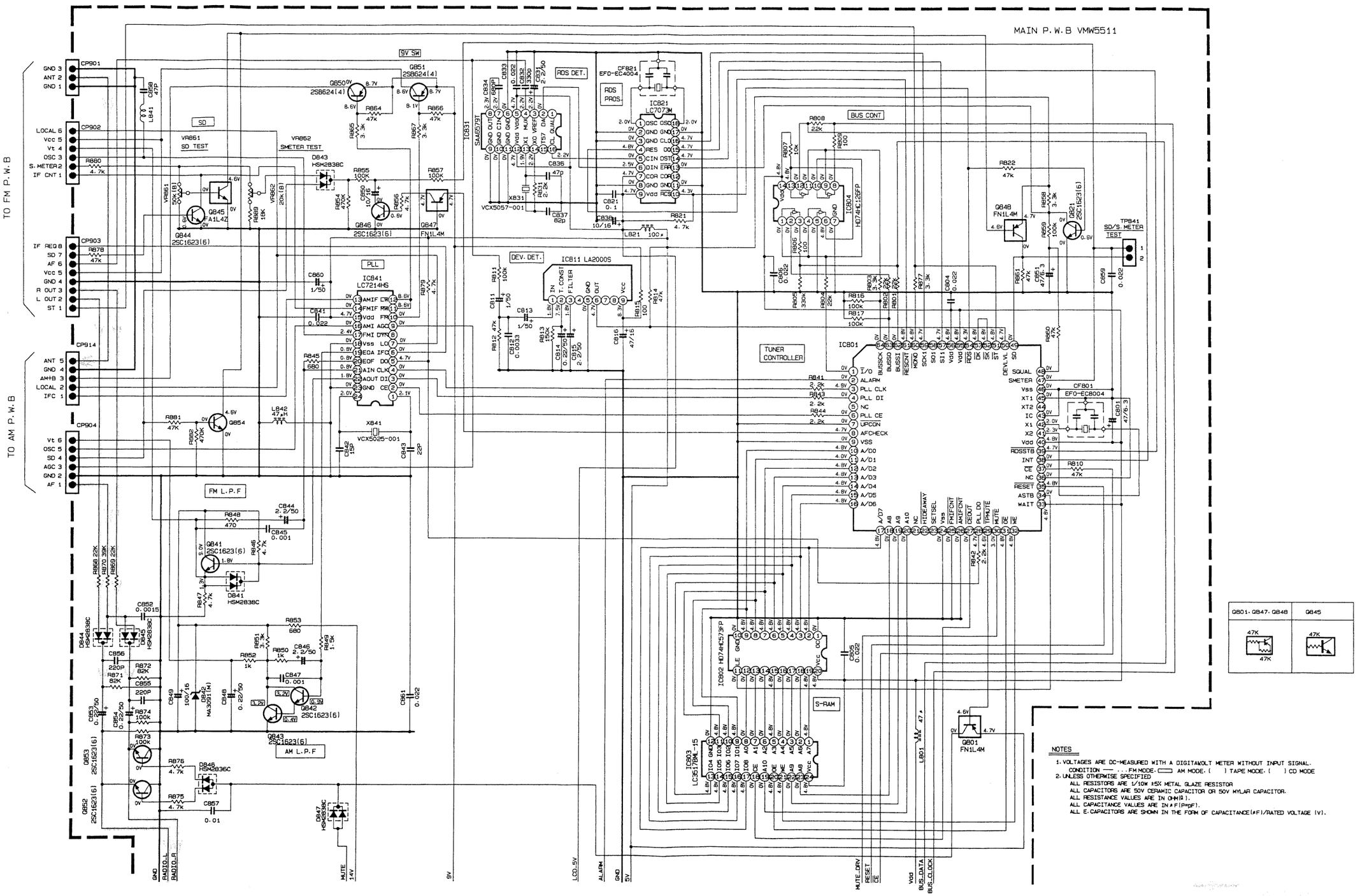


NOTES

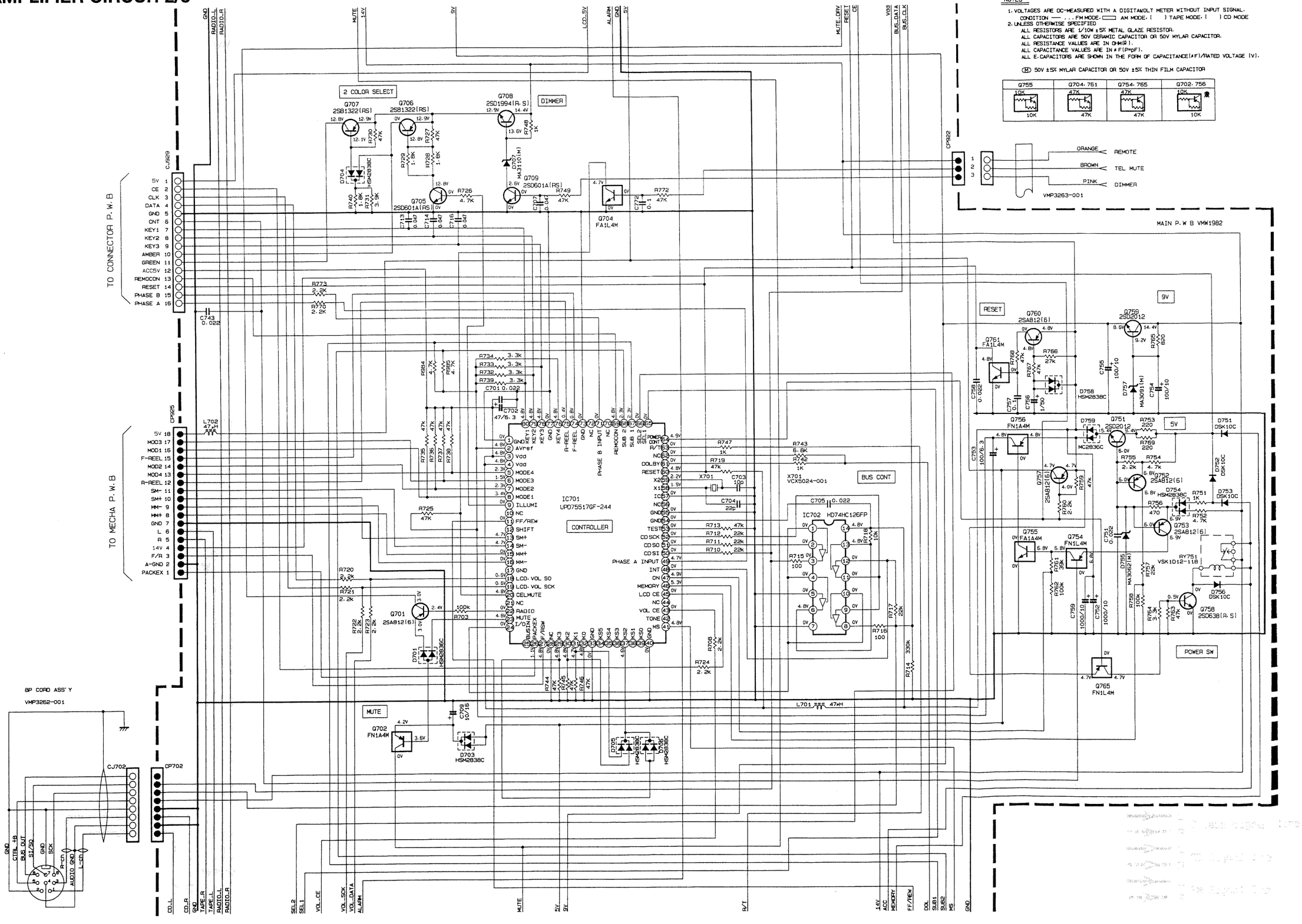
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
   CONDITION——FM MODE, ▭ AM MODE
2. UNLESS OTHERWISE SPECIFIED.
   ALL RESISTORS ARE 1/10W ±5% METAL GLAZE RESISTOR.
   ALL CAPACITORS ARE 50V CERAMIC CAPACITOR OR 50V MYLAR CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE(V).



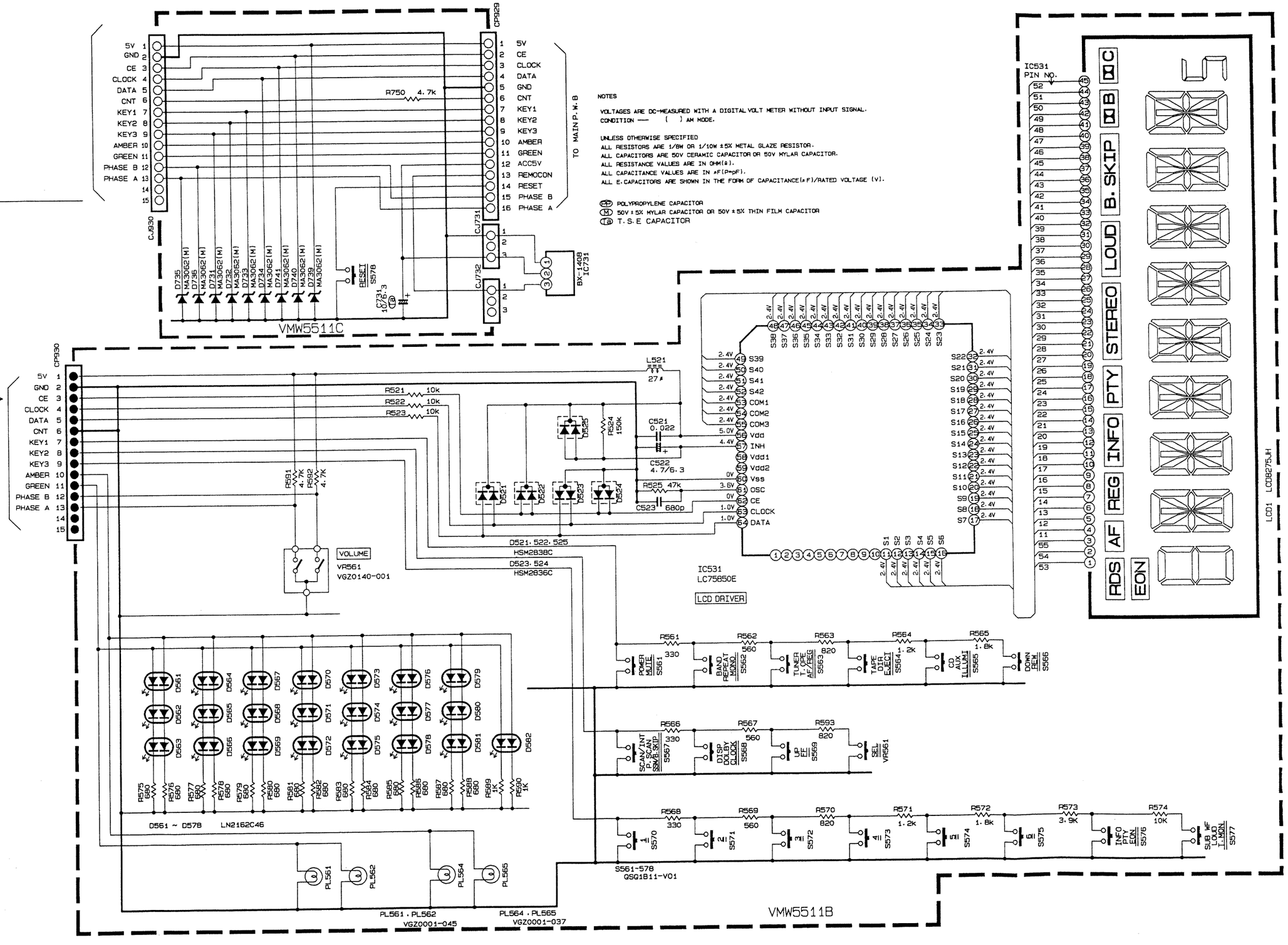
6.2 AMPLIFIER CIRCUIT 1/3



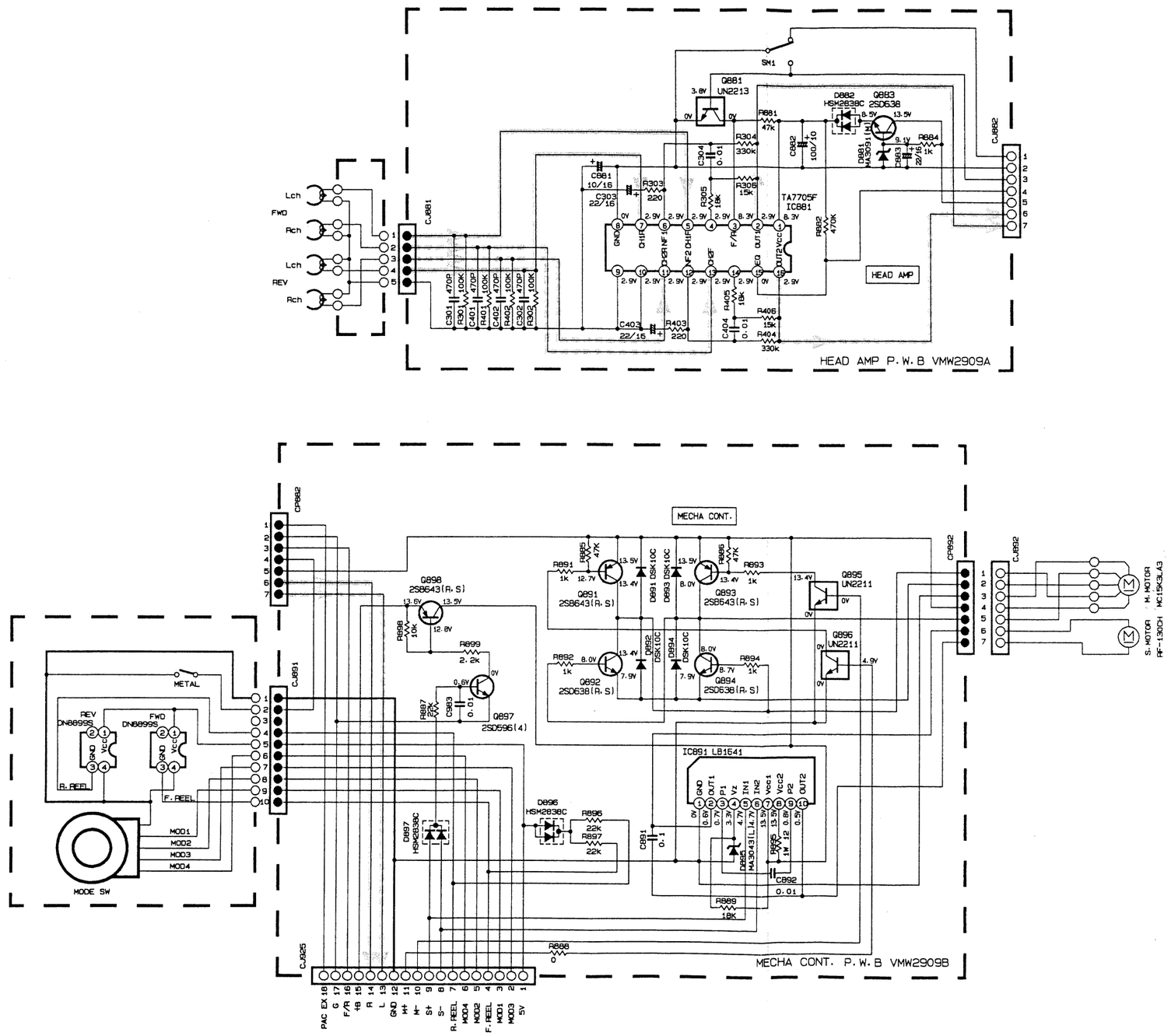
6.3 AMPLIFIER CIRCUIT 2/3



6.5 FRONT CONTROLL ASSY



6.6 MECHA ASSY CONTROLL-CIRCUIT

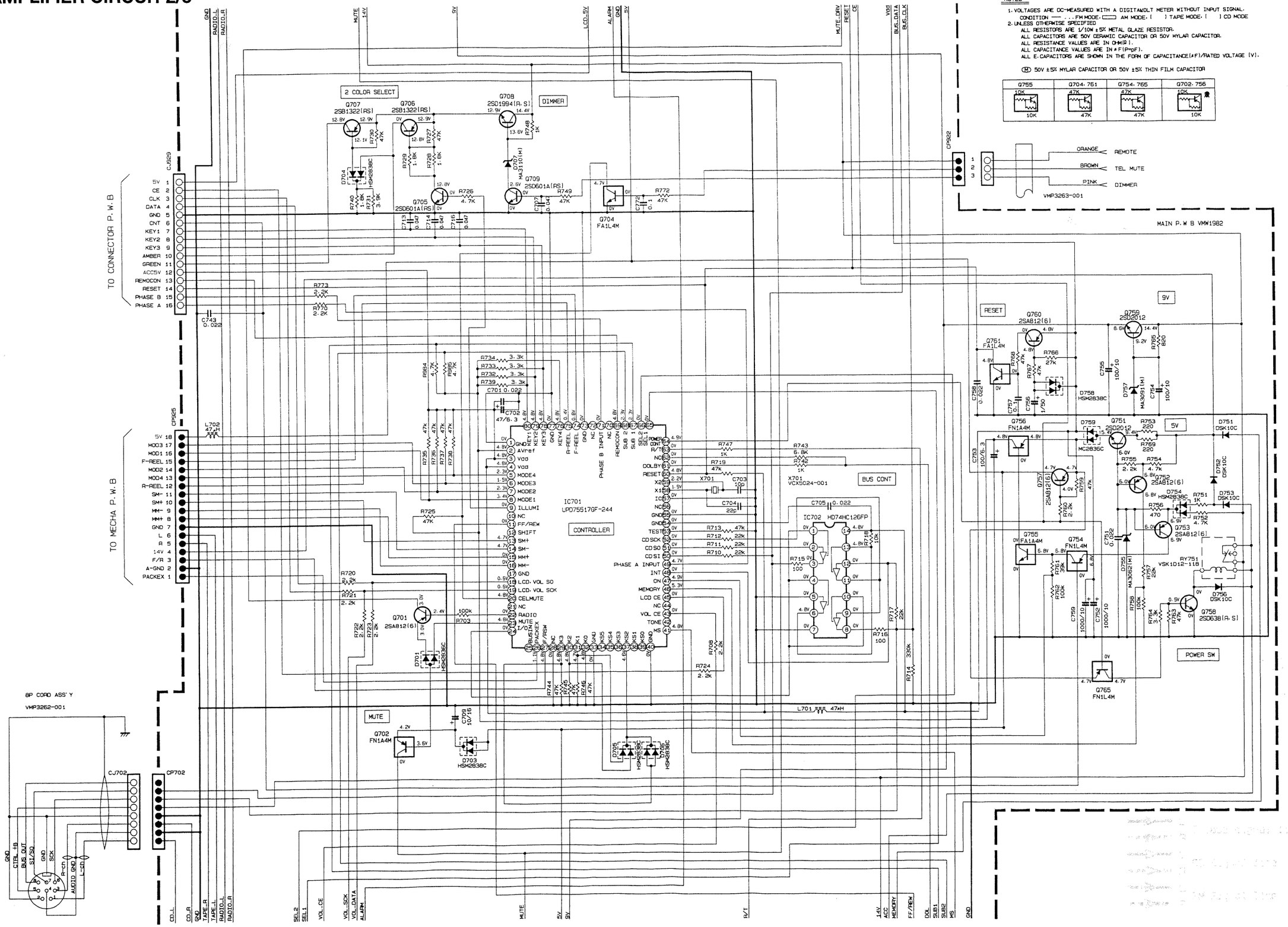


UN2213	UN2211
47k	10k

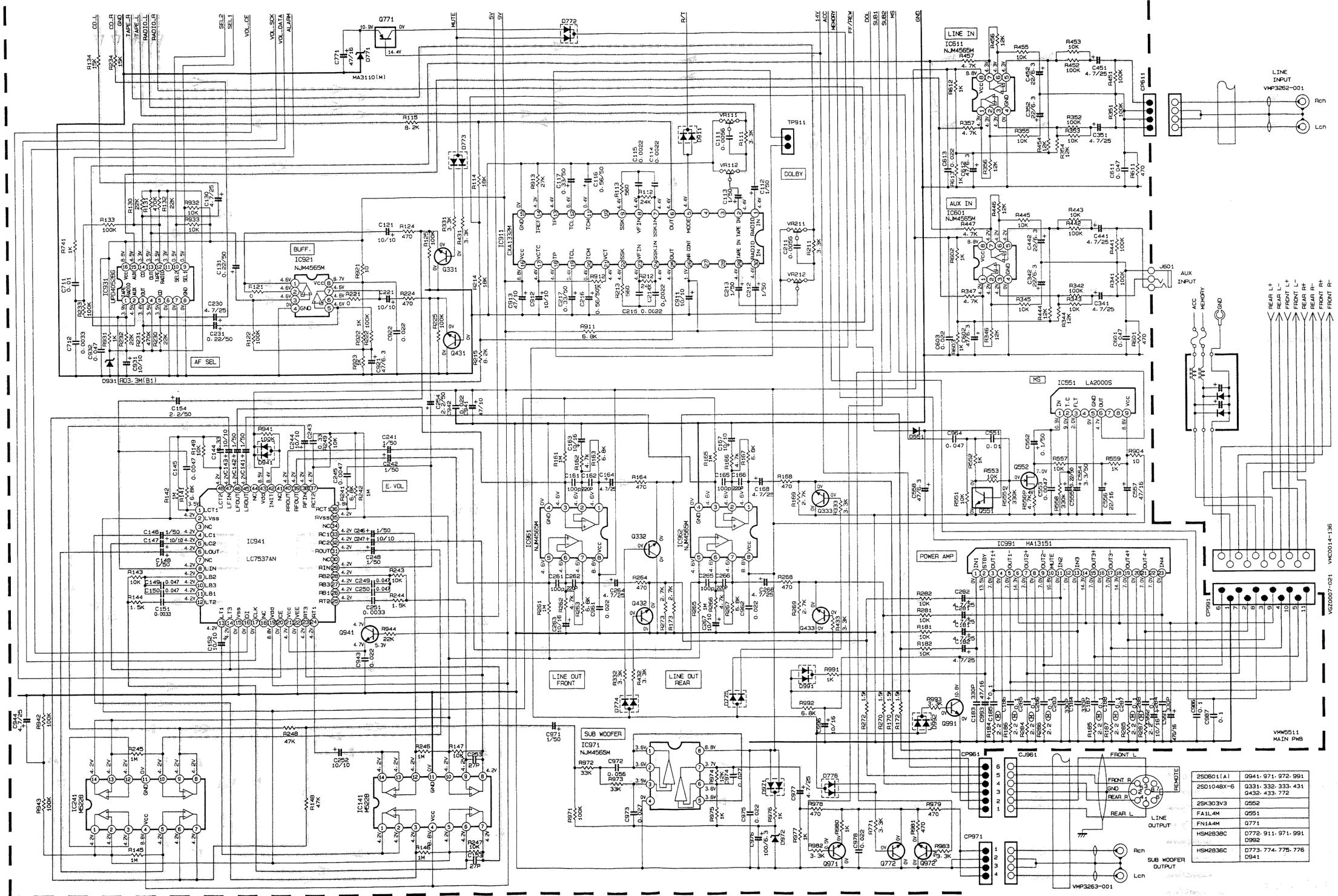
NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
   CONDITION —— TAPE MODE
2. UNLESS OTHERWISE SPECIFIED
   ALL RESISTORS ARE 1/8W OR 1/10W ±5% METAL GLAZE RESISTOR.
   ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITANCE VALUES ARE IN μF(PmpF).
   ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE (V).

6.3 AMPLIFIER CIRCUIT 2/3



6.4 AMPLIFIER CIRCUIT 3/3



2SD601(A)	Q941·971·972·991
2SD1048X-6	Q331·332·333·431 Q432·433·772
2SK303V3	Q552
FA1L4M	Q551
FN1A4M	Q771
HSM2838C	D772·911·971·991 D992
HSM2836C	D773·774·775·776 D941

Q551	Q771
47K	10K
47K	10K

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAWOLT METER WITHOUT INPUT SIGNAL.
   CONDITION —— ...FM MODE.

2. UNLESS OTHERWISE SPECIFIED
   ALL RESISTORS ARE 1/10W ±5% METAL GLAZE RESISTOR.
   ALL CAPACITORS ARE 50V CERAMIC CAPACITOR OR 50V MYLAR CAPACITOR.
   ALL RESISTANCE VALUES ARE IN Ω=Ω(Ω). ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE (V).
   (M) 50V ±5% MYLAR CAPACITOR OR 50V ±5% THIN FILM CAPACITOR

7.1 MECHANISM CONTROL/HEAD P.C.-BOARD

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 406	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 881	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 882	NRS181J-473NY	MG RESISTOR	47K 5% 1/8W	
	R 883	NRSA02J-220NY	MG RESISTOR	22 5% 1/10W	
	R 884	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 885	NRS181J-473NY	MG RESISTOR	47K 5% 1/8W	
	R 886	NRS181J-473NY	MG RESISTOR	47K 5% 1/8W	
	R 887	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 888	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 889	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 891	NRS181J-102NY	MG RESISTOR	1.0K 5% 1/8W	
	R 892	NRS181J-102NY	MG RESISTOR	1.0K 5% 1/8W	
	R 893	NRS181J-102NY	MG RESISTOR	1.0K 5% 1/8W	
	R 894	NRS181J-102NY	MG RESISTOR	1.0K 5% 1/8W	
	R 895	QRG016J-120A	OMF RESISTOR	12 5% 1/1W	
	R 896	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 897	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 898	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 899	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	B 885	NRSA02J-ORONY	MG RESISTOR	5% 1/10W	
	BUS R	NRS181J-ORONY	MG RESISTOR	5% 1/8W	
	C 301	NCS21HJ-821AY	C CAPACITOR	820PF 5% 50V	
	C 302	NCS21HJ-821AY	C CAPACITOR	820PF 5% 50V	
	C 303	QER41CM-226VM	E CAPACITOR	22MF 20% 16V	
	C 304	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 401	NCS21HJ-821AY	C CAPACITOR	820PF 5% 50V	
	C 402	NCS21HJ-821AY	C CAPACITOR	820PF 5% 50V	
	C 403	QER41CM-226VM	E CAPACITOR	22MF 20% 16V	
	C 404	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 881	QER41CM-106M	E CAPACITOR	10MF 20% 16V	
	C 882	QER41AM-107	E CAPACITOR	100MF 20% 10V	
	C 883	QER41CM-226VM	E CAPACITOR	22MF 20% 16V	
	C 891	NCB21EK-104AY	C CAPACITOR	.10MF 10% 25V	
	C 892	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 983	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	CJ881	VMC0115-005	CONNECTOR		
	CJ882	VMC0136-007	CONNECTOR		
	CJ891	VMC0115-010	CONNECTOR	FOR CONTACT	
	CJ925	VMC0232-S18	CONNECTOR	FOR MAIN BOARD	
	CP882	VMC0135-007	CONNECTOR	FOR HEAD BOARD	
	CP892	VMC0282-R07	CONNECTOR	FOR MOTOR	
	D 881	MA3091(M)	ZENER DIODE		
	D 882	HSM2838C	DIODE		
	D 891	DSK10C-E	DIODE		
	D 892	DSK10C-E	DIODE		
	D 893	DSK10C-E	DIODE		
	D 894	DSK10C-E	DIODE		
	D 895	MA3043(L)	ZENER DIODE		
	D 896	HSM2838C	DIODE		
	D 897	HSM2838C	DIODE		
	D 898	HSM2836C	DIODE		
	IC881	TA7705F	IC	HEAD AMP	
	IC891	LB1641	IC	MOTOR DRIVE	
	Q 881	FA1L4M	TRANSISTOR		
	Q 883	2SD638(R,S)	TRANSISTOR		
	Q 891	2SB643	TRANSISTOR		
	Q 892	2SD638(R,S)	TRANSISTOR		
	Q 893	2SB643	TRANSISTOR		
	Q 894	2SD638(R,S)	TRANSISTOR		
	Q 895	FA1A4M	TRANSISTOR		
	Q 896	FA1A4M	TRANSISTOR		
	Q 897	2SD596(4)	TRANSISTOR		
	Q 898	2SB643	TRANSISTOR		
	R 302	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 303	NRSA02J-221NY	MG RESISTOR	220 5% 1/10W	
	R 304	NRSA02J-334NY	MG RESISTOR	330K 5% 1/10W	
	R 305	NRSA02J-183NY	MG RESISTOR	18K 5% 1/10W	
	R 306	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 401	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 402	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 403	NRSA02J-221NY	MG RESISTOR	220 5% 1/10W	
	R 404	NRSA02J-334NY	MG RESISTOR	330K 5% 1/10W	
	R 405	NRSA02J-183NY	MG RESISTOR	18K 5% 1/10W	

■ Mechanism Control / Head P.C.Board

1 2 3 4 5

A

B

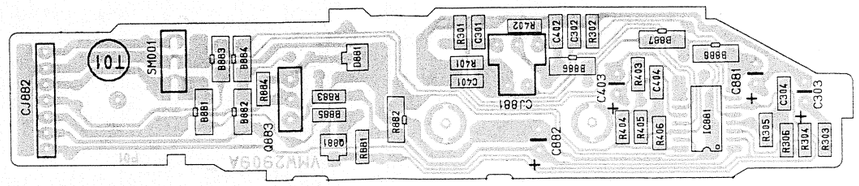
C

D

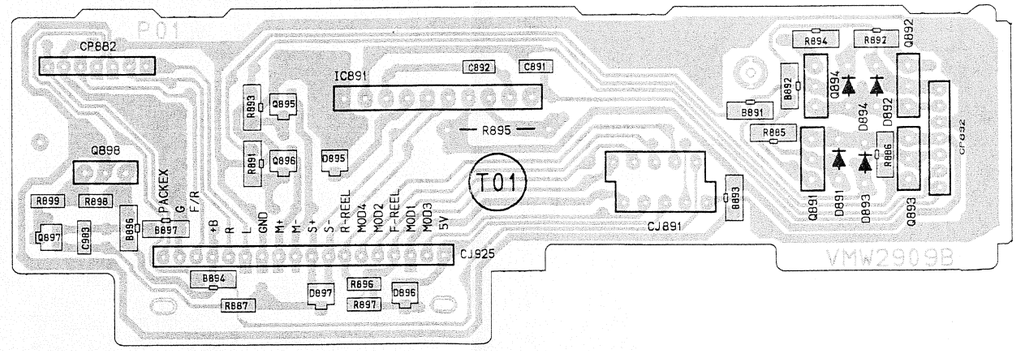
E

F

◆ Head P.C.Board



◆ Mechanism Control P.C.Board (Parts List Page 41)

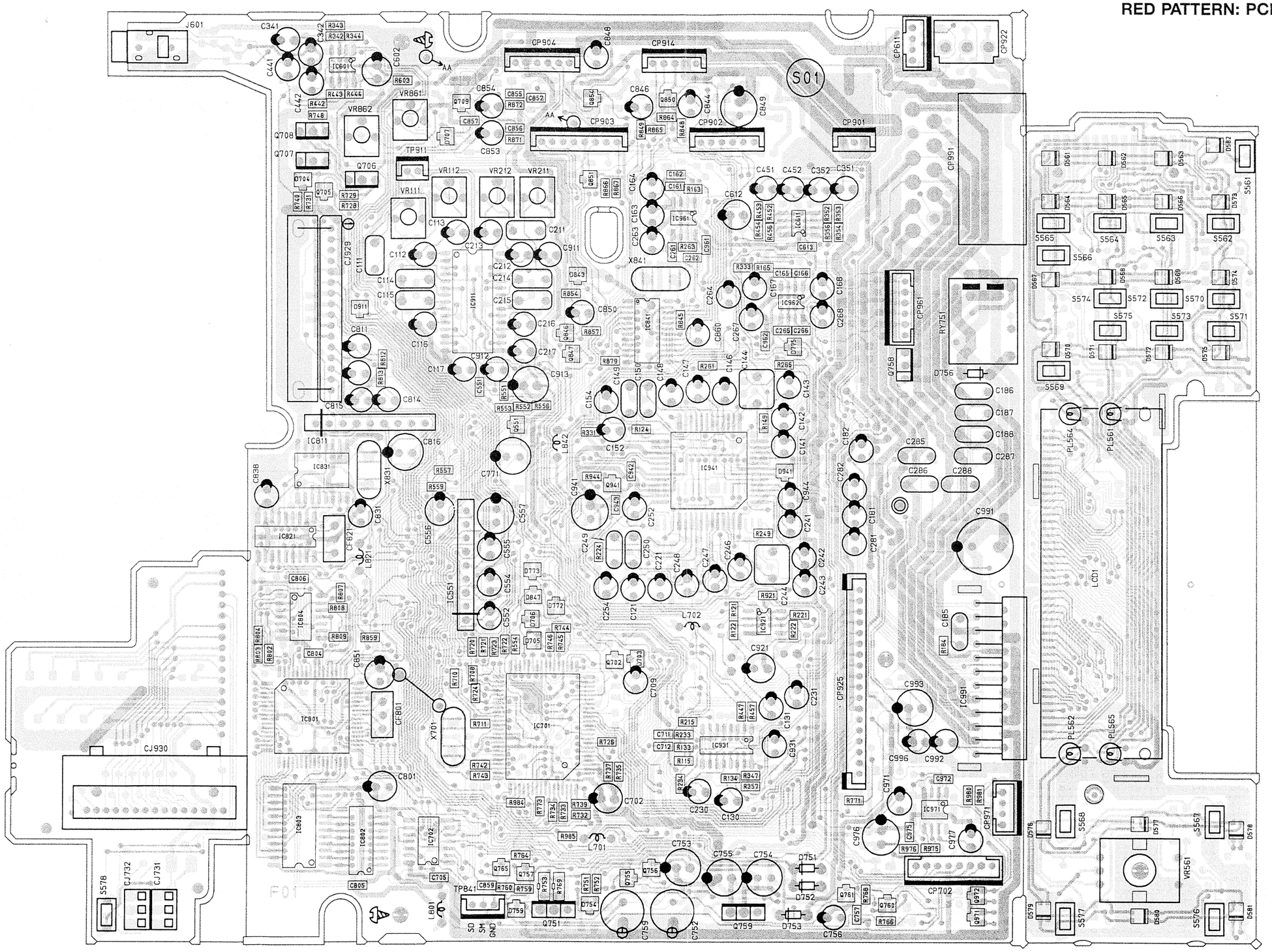


7.2 MAIN P.C. BOARD, LCD-BOARD, CONNECTOR BOARD COMPONENT SIDE

BLACK COLOUR: COMPONENTS

BLACK PATTERN: PCB COMPONENT SIDE

RED PATTERN: PCB SOLDER SIDE

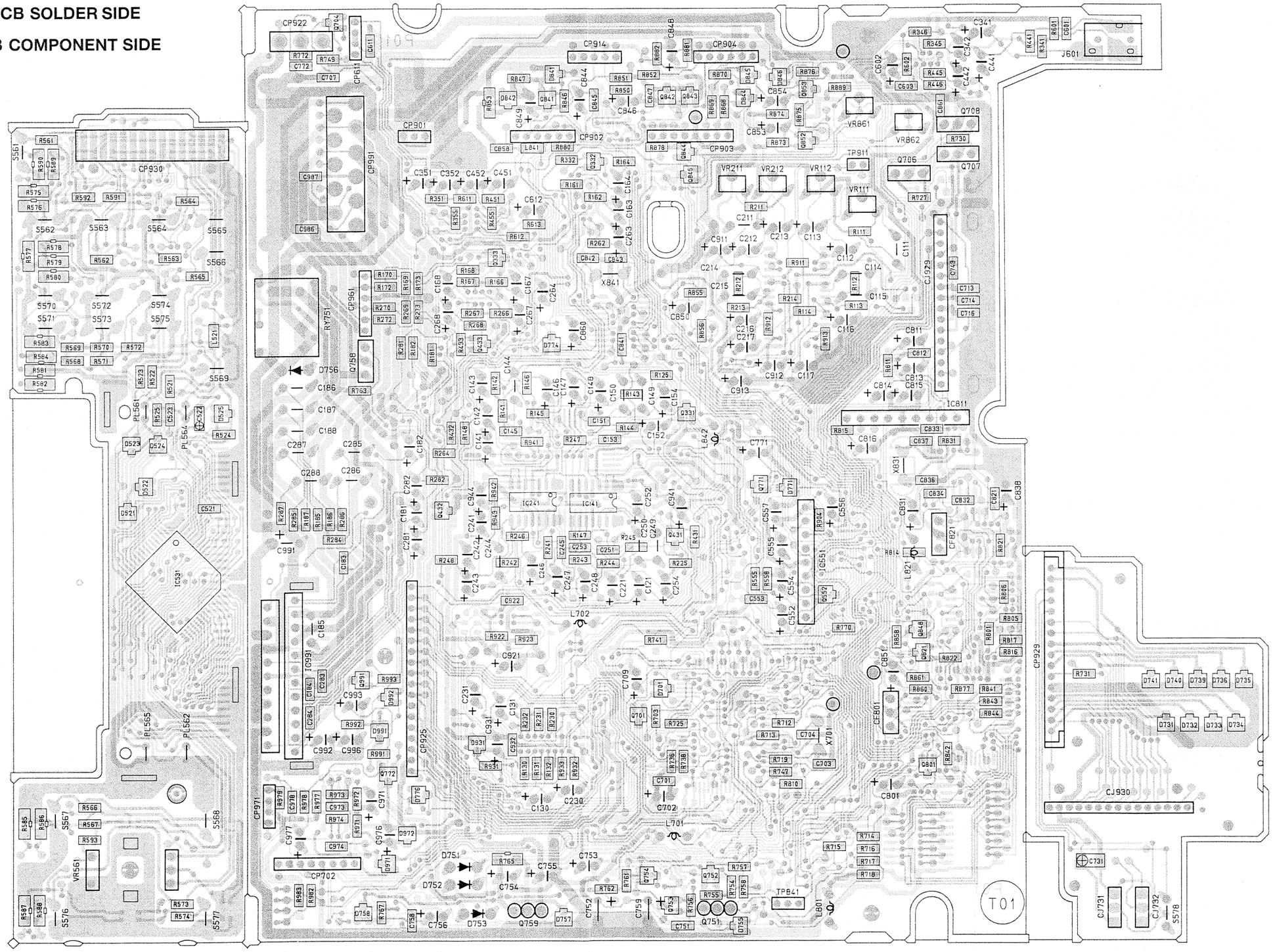


MAIN P.C.-BOARD, LCD BOARD; CONNECTOR BOARD SOLDER SIDE

BLACK COLOUR: COMPONENTS

BLACK PATTERN: PCB SOLDER SIDE

RED PATTERN: PCB COMPONENT SIDE



⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 111	QFLA1HJ-562ZM	M CAPACITOR	5600PF 5% 50V	
	C 112	QER41HM-105VM	E CAPACITOR	1.0MF 20% 50V	
	C 113	QER41HM-105VM	E CAPACITOR	1.0MF 20% 50V	
	C 114	QFLA1HJ-222ZM	M CAPACITOR	2200PF 5% 50V	
	C 115	QFLA1HJ-222ZM	M CAPACITOR	2200PF 5% 50V	
	C 116	QERF1HM-564ZM	E CAPACITOR	.56MF 20% 50V	
	C 117	QER41HM-334VM	E CAPACITOR	.33MF 20% 50V	
	C 121	QERF1AM-106ZM	E CAPACITOR	10MF 20% 10V	
	C 130	QER41EM-475VM	E CAPACITOR	4.7MF 20% 25V	
	C 131	QER41HM-224VS	E CAPACITOR	.22MF 20% 50V	
	C 141	QER41HM-105VM	E CAPACITOR	1.0MF 20% 50V	
	C 142	QER41HM-105VM	E CAPACITOR	1.0MF 20% 50V	
	C 143	QERF1AM-106ZM	E CAPACITOR	10MF 20% 10V	
	C 144	QFV11HJ-334AZM	TF CAPACITOR	.33MF 5% 50V	
	C 145	NCB21HK-472AY	C CAPACITOR	4700PF 10% 50V	
	C 146	QER41HM-105VM	E CAPACITOR	1.0MF 20% 50V	
	C 147	QERF1AM-106ZM	E CAPACITOR	10MF 20% 10V	
	C 148	QER41HM-105VM	E CAPACITOR	1.0MF 20% 50V	
	C 149	QFV81HJ-473	TF CAPACITOR	.047MF 5% 50V	
	C 150	QFV81HJ-473	TF CAPACITOR	.047MF 5% 50V	
	C 151	NCB21HK-332AY	C CAPACITOR	3300PF 10% 50V	
	C 152	QERF1AM-106ZM	E CAPACITOR	10MF 20% 10V	
	C 153	NCT21CH-270AY	C CAPASITOR	27PF +50:-10% 1	
	C 154	QER41HM-225	E CAPACITOR	2.2MF 20% 50V	
	C 161	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 162	NCT21CH-221AY	C CAPACITOR	220PF +50:-10%	
	C 163	QER41CM-106M	E CAPACITOR	10MF 20% 16V	
	C 164	QER41EM-475VM	E CAPACITOR	4.7MF 20% 25V	
	C 165	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 166	NCT21CH-221AY	C CAPACITOR	220PF +50:-10%	
	C 167	QERF1AM-106ZM	E CAPACITOR	10MF 20% 10V	
	C 168	QER41EM-475VM	E CAPACITOR	4.7MF 20% 25V	
	C 181	QER41EM-475VM	E CAPACITOR	4.7MF 20% 25V	
	C 182	QER41EM-475VM	E CAPACITOR	4.7MF 20% 25V	
	C 183	NCS21HJ-331AY	C CAPACITOR	330PF 5% 50V	
	C 184	NCS21HJ-331AY	C CAPACITOR	330PF 5% 50V	
	C 185	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C 186	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C 187	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C 188	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C 211	QFLA1HJ-562ZM	M CAPACITOR	5600PF 5% 50V	
	C 212	QER41HM-105VM	E CAPACITOR	1.0MF 20% 50V	
	C 213	QER41HM-105VM	E CAPACITOR	1.0MF 20% 50V	
	C 214	QFLA1HJ-222ZM	M CAPACITOR	2200PF 5% 50V	
	C 215	QFLA1HJ-222ZM	M CAPACITOR	2200PF 5% 50V	
	C 216	QERF1HM-564ZM	E CAPACITOR	.56MF 20% 50V	
	C 217	QER41HM-334VM	E CAPACITOR	.33MF 20% 50V	
	C 221	QERF1AM-106ZM	E CAPACITOR	10MF 20% 10V	
	C 230	QER41EM-475VM	E CAPACITOR	4.7MF 20% 25V	
	C 231	QER41HM-224VS	E CAPACITOR	.22MF 20% 50V	
	C 241	QER41HM-105VM	E CAPACITOR	1.0MF 20% 50V	
	C 242	QER41HM-105VM	E CAPACITOR	1.0MF 20% 50V	
	C 243	QERF1AM-106ZM	E CAPACITOR	10MF 20% 10V	
	C 244	QFV11HJ-334AZM	TF CAPACITOR	.33MF 5% 50V	
	C 245	NCB21HK-472AY	C CAPACITOR	4700PF 10% 50V	

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 246	QER41HM-105VM	E CAPACITOR	1.0MF 20% 50V	
	C 247	QERF1AM-106ZM	E CAPACITOR	10MF 20% 10V	
	C 248	QER41HM-105VM	E CAPACITOR	1.0MF 20% 50V	
	C 249	QFV81HJ-473	TF CAPACITOR	.047MF 5% 50V	
	C 250	QFV81HJ-473	TF CAPACITOR	.047MF 5% 50V	
	C 251	NCB21HK-332AY	C CAPACITOR	3300PF 10% 50V	
	C 252	QERF1AM-106ZM	E CAPACITOR	10MF 20% 10V	
	C 253	NCT21CH-270AY	C CAPASITOR	27PF +50:-10% 1	
	C 254	QER41HM-225	E CAPACITOR	2.2MF 20% 50V	
	C 261	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 262	NCT21CH-221AY	C CAPACITOR	220PF +50:-10%	
	C 263	QER41CM-106M	E CAPACITOR	10MF 20% 16V	
	C 264	QER41EM-475VM	E CAPACITOR	4.7MF 20% 25V	
	C 265	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 266	NCT21CH-221AY	C CAPACITOR	220PF +50:-10%	
	C 267	QERF1AM-106ZM	E CAPACITOR	10MF 20% 10V	
	C 268	QER41EM-475VM	E CAPACITOR	4.7MF 20% 25V	
	C 281	QER41EM-475VM	E CAPACITOR	4.7MF 20% 25V	
	C 282	QER41EM-475VM	E CAPACITOR	4.7MF 20% 25V	
	C 283	NCS21HJ-331AY	C CAPACITOR	330PF 5% 50V	
	C 284	NCS21HJ-331AY	C CAPACITOR	330PF 5% 50V	
	C 285	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C 286	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C 287	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C 288	QFV41HJ-104	TF CAPACITOR	.10MF 5% 50V	
	C 341	QER41EM-475VM	E CAPACITOR	4.7MF 20% 25V	
	C 342	QER40JM-226	E CAPACITOR	22MF 20% 6.3V	
	C 351	QER41EM-475VM	E CAPACITOR	4.7MF 20% 25V	
	C 352	QER40JM-226	E CAPACITOR	22MF 20% 6.3V	
	C 441	QER41EM-475VM	E CAPACITOR	4.7MF 20% 25V	
	C 442	QER40JM-226	E CAPACITOR	22MF 20% 6.3V	
	C 451	QER41EM-475VM	E CAPACITOR	4.7MF 20% 25V	
	C 452	QER40JM-226	E CAPACITOR	22MF 20% 6.3V	
	C 551	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 552	QER41HM-104M	E CAPACITOR	.10MF 20% 50V	
	C 553	NCB21HK-472AY	C CAPACITOR	4700PF 10% 50V	
	C 554	QER41HM-224VS	E CAPACITOR	.22MF 20% 50V	
	C 555	QERF1HM-335ZN	E CAPACITOR	3.3MF 20% 50V	
	C 556	QER41CM-226VM	E CAPACITOR	22MF 20% 16V	
	C 557	QER41CM-476M	E CAPACITOR	47MF 20% 16V	
	C 601	NCB21EK-473AY	C CAPACITOR	.047MF 10% 25V	
	C 602	QERF0JM-476ZN	E CAPACITOR	47MF 20% 6.3V	
	C 603	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 611	NCB21EK-473AY	C CAPACITOR	.047MF 10% 25V	
	C 612	QERF0JM-476ZN	E CAPACITOR	47MF 20% 6.3V	
	C 613	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 701	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 702	QERF0JM-476ZN	E CAPACITOR	47MF 20% 6.3V	
	C 703	NCT21CH-100AY	C CAPACITOR	10PF +50:-10% 1	
	C 704	NCT21CH-220AY	C CAPACITOR	22PF +50:-10% 1	
	C 705	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 707	NCB21EK-473AY	C CAPACITOR	.047MF 10% 25V	
	C 709	QER41CM-106M	E CAPACITOR	10MF 20% 16V	
	C 711	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 712	NCB21HK-332AY	C CAPACITOR	3300PF 10% 50V	

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 713	NCB21EK-473AY	C CAPACITOR	.047MF 10% 25V	
	C 714	NCB21EK-473AY	C CAPACITOR	.047MF 10% 25V	
	C 716	NCB21EK-473AY	C CAPACITOR	.047MF 10% 25V	
	C 743	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 751	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 752	VCE0040-001	E CAPACITOR		
	C 753	QERF0JM-107ZN	E CAPACITOR	100MF 20% 6.3V	
	C 754	QER41AM-107	E CAPACITOR	100MF 20% 10V	
	C 755	QER41AM-107	E CAPACITOR	100MF 20% 10V	
	C 756	QER41HM-105VM	E CAPACITOR	1.0MF 20% 50V	
	C 757	NCF21HZ-104AY	C CAPACITOR	.10MF +80:-20%	
	C 758	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 759	VCE0040-001	E CAPACITOR		
	C 771	QER41CM-476M	E CAPACITOR	47MF 20% 16V	
	C 772	NCF21HZ-104AY	C CAPACITOR	.10MF +80:-20%	
	C 801	QERF0JM-476ZN	E CAPACITOR	47MF 20% 6.3V	
	C 804	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 805	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 806	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 811	QER41HM-105VM	E CAPACITOR	1.0MF 20% 50V	
	C 812	NCB21HK-332AY	C CAPACITOR	3300PF 10% 50V	
	C 813	QER41HM-105VM	E CAPACITOR	1.0MF 20% 50V	
	C 814	QER41HM-224VS	E CAPACITOR	.22MF 20% 50V	
	C 815	QER41HM-225	E CAPACITOR	2.2MF 20% 50V	
	C 816	QER41CM-476M	E CAPACITOR	47MF 20% 16V	
	C 821	NCF21HZ-104AY	C CAPACITOR	.10MF +80:-20%	
	C 831	QER41HM-225	E CAPACITOR	2.2MF 20% 50V	
	C 832	NCS21HJ-331AY	C CAPACITOR	330PF 5% 50V	
	C 833	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 834	NCS21HJ-681AY	C CAPACITOR	680PF 5% 50V	
	C 836	NCT21CH-470AY	C CAPACITOR	47PF +50:-10% 1	
	C 837	NCS21HJ-820AY	C CAPACITOR	82PF 5% 50V	
	C 838	QER41CM-106M	E CAPACITOR	10MF 20% 16V	
	C 841	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 842	NCT21CH-150AY	C CAPACITOR	15PF +50:-10% 1	
	C 843	NCT21CH-220AY	C CAPACITOR	22PF +50:-10% 1	
	C 844	QER41HM-225	E CAPACITOR	2.2MF 20% 50V	
	C 845	NCB21HK-102AY	C CAPACITOR	1000PF 10% 50V	
	C 846	QER41HM-225	E CAPACITOR	2.2MF 20% 50V	
	C 847	NCB21HK-102AY	C CAPACITOR	1000PF 10% 50V	
	C 848	QER41HM-224VS	E CAPACITOR	.22MF 20% 50V	
	C 849	QERF1CM-107ZM	E CAPACITOR	100MF 20% 16V	
	C 850	QER41CM-106M	E CAPACITOR	10MF 20% 16V	
	C 851	QERF0JM-476ZN	E CAPACITOR	47MF 20% 6.3V	
	C 852	NCB21HK-152AY	C CAPACITOR	1500PF 10% 50V	
	C 853	QER41HM-224VS	E CAPACITOR	.22MF 20% 50V	
	C 854	QER41HM-224VS	E CAPACITOR	.22MF 20% 50V	
	C 855	NCS21HJ-221AY	C CAPACITOR	220PF 5% 50V	
	C 856	NCS21HJ-221AY	C CAPACITOR	220PF 5% 50V	
	C 857	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 858	NCT21CH-470AY	C CAPACITOR	47PF +50:-10% 1	
	C 859	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 860	QER41HM-105VM	E CAPACITOR	1.0MF 20% 50V	
	C 861	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 911	QERF1AM-106ZM	E CAPACITOR	10MF 20% 10V	

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 912	QERF1AM-106ZM	E CAPACITOR	10MF 20% 10V	
	C 913	QERF1AM-476ZN	E CAPACITOR	47MF 20% 10V	
	C 921	QERF0JM-476ZN	E CAPACITOR	47MF 20% 6.3V	
	C 922	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 931	QERF1AM-106ZM	E CAPACITOR	10MF 20% 10V	
	C 932	NCB21EK-473AY	C CAPACITOR	.047MF 10% 25V	
	C 941	QERF1AM-476ZN	E CAPACITOR	47MF 20% 10V	
	C 942	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 943	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 944	QER41EM-475VM	E CAPACITOR	4.7MF 20% 25V	
	C 961	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 962	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 964	QCC11EM-473V	C CAPACITOR	.047MF 20% 25V	
	C 971	QER41HM-105VM	E CAPACITOR	1.0MF 20% 50V	
	C 972	NCB21EK-563AY	C CAPACITOR	.056MF 10% 25V	
	C 973	NCB21HK-273AY	C CAPACITOR	.027MF 10% 50V	
	C 974	NCB21HK-273AY	C CAPACITOR	.027MF 10% 50V	
	C 975	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 976	QERF0JM-107ZN	E CAPACITOR	100MF 20% 6.3V	
	C 977	QER41EM-475VM	E CAPACITOR	4.7MF 20% 25V	
	C 978	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 986	NCF21HZ-104AY	C CAPACITOR	.10MF +80:-20%	
	C 987	NCF21HZ-104AY	C CAPACITOR	.10MF +80:-20%	
	C 991	QETC1CM-477ZN	E CAPACITOR	470MF 20% 16V	
	C 992	QER41CM-106M	E CAPACITOR	10MF 20% 16V	
	C 993	QER41CM-476M	E CAPACITOR	47MF 20% 16V	
	C 996	QER41CM-106M	E CAPACITOR	10MF 20% 16V	
	CF801	EFO-GC8004T4	CERAMIC RESONAT		
	CF821	EFO-EC4004T4	CERA LOCK		
	CJ929	VMC0232-S16	CONNECTOR		
	CP611	VMC0075-004N	CONNECTOR	LINE IN	
	CP702	VMC0075-008N	CONNECTOR		
	CP901	VMC0135-003	CONNECTOR		
	CP902	VMC0135-006	CONNECTOR		
	CP903	VMC0135-008	CONNECTOR		
	CP904	VMC0135-006	CONNECTOR		
	CP914	VMC0135-005	CONNECTOR		
	CP922	VMC0284-003	CONNECTOR		
	CP925	VMC0232-P18	CONNECTOR		
	CP961	VMC0075-006N	CONNECTOR	LINE OUT	
	CP974	VMC0075-004N	CONNECTOR	SUB WOOFER	
	CP991	VGZ0007-022	FEED THRU CONN		
	D 701	HSM2836C	DIODE		
	D 703	HSM2838C	DIODE		
	D 704	HSM2838C	DIODE		
	D 705	HSM2838C	DIODE		
	D 706	HSM2838C	DIODE		
	D 707	MA3110(M)	ZENER DIODE		
	D 751	DSK10C-E	DIODE		
	D 752	DSK10C-E	DIODE		
	D 753	DSK10C-E	DIODE		
	D 754	HSM2838C	DIODE		
	D 755	MA3062(M)	ZENER DIODE		
	D 756	DSK10C-E	DIODE		
	D 757	MA3091(M)	ZENER DIODE		

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	D 758	HSM2838C	DIODE		
	D 759	HSM2836C	DIODE		
	D 771	MA3110(M)	ZENER DIODE		
	D 772	HSM2838C	DIODE		
	D 773	HSM2836C	DIODE		
	D 774	HSM2836C	DIODE		
	D 775	HSM2836C	DIODE		
	D 776	HSM2836C	DIODE		
	D 841	HSM2838C	DIODE		
	D 842	MA3091(M)	ZENER DIODE		
	D 843	HSM2838C	DIODE		
	D 844	HSM2838C	DIODE		
	D 845	HSM2838C	DIODE		
	D 846	HSM2836C	DIODE		
	D 847	HSM2838C	DIODE		
	D 911	HSM2838C	DIODE		
	D 931	RD3.3M(B1)	Z DIODE		
	D 941	HSM2838C	DIODE		
	D 971	HSM2838C	DIODE		
	D 972	MA3039(L)	ZENER DIODE		
	D 991	HSM2838C	DIODE		
	D 992	HSM2838C	DIODE		
	IC141	M5228FP	IC		
	IC241	M5228FP	IC		
	IC551	LA2000S	IC		
	IC601	NJM4565M	IC		
	IC611	NJM4565M	IC		
	IC701	UPD75517GF-244	IC		
	IC702	HD74HC126FP	IC		
	IC801	UPD78013GC-568	IC		
	IC802	HD74HC573FP	IC		
	IC803	LC3517BML-15	IC		
	IC804	HD74HC126FP	IC		
	IC811	LA2000S	IC		
	IC821	LC7073M	IC		
	IC831	SAA6579T	IC		
	IC841	LC72140MHS	IC		
	IC911	CXA1332M	IC		
	IC921	NJM4565M	IC		
	IC931	UPD4052BG	IC		
	IC941	LC7537AN	IC		
	IC961	NJM4565M	IC		
	IC962	NJM4565M	IC		
	IC971	NJM4565M	IC		
	IC991	HA13151	IC		
	J 601	VMJ4030-001	JACK		
	L 701	VQP0015-470Z	INDUCTOR		
	L 702	VQP0015-470Z	INDUCTOR		
	L 801	VQP0015-470Z	INDUCTOR		
	L 821	VQP0015-101Z	INDUCTOR		
	L 841	VQP1002-4R7Y	INDUCTOR		
	L 842	VQP0015-470Z	INDUCTOR		
	Q 331	2SD1048X-6HL	TRANSISTOR		
	Q 332	2SD1048X-6HL	TRANSISTOR		
	Q 333	2SD1048X-6HL	TRANSISTOR		

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	Q 431	2SD1048X-6HL	TRANSISTOR		
	Q 432	2SD1048X-6HL	TRANSISTOR		
	Q 433	2SD1048X-6HL	TRANSISTOR		
	Q 551	2SD1048X-6HL	TRANSISTOR		
	Q 552	2SK303V3	TRANSISTOR(FET)		
	Q 701	2SA812(6)	TRANSISTOR		
	Q 702	FN1A4MX	TRANSISTOR		
	Q 704	FA1L4M	TRANSISTOR		
	Q 705	2SD601A(RS)	TRANSISTOR		
	Q 706	2SB1322(RS)	TRANSISTOR		
	Q 707	2SB1322(RS)	TRANSISTOR		
	Q 708	2SD1994(R,S)	TRANRISTOR		
	Q 709	2SD601A(RS)	TRANSISTOR		
	Q 751	2SD1266	TRANSISTOR		
	Q 752	2SA812(6)	TRANSISTOR		
	Q 753	2SA812(6)	TRANSISTOR		
	Q 754	FN1L4M	TRANSISTOR		
	Q 755	FA1A4M	TRANSISTOR		
	Q 756	FN1A4MX	TRANSISTOR		
	Q 757	2SA812(6)	TRANSISTOR		
	Q 758	2SD1994(R,S)	TRANRISTOR		
	Q 759	2SD1266	TRANSISTOR		
	Q 760	2SA812(6)	TRANSISTOR		
	Q 761	FA1L4M	TRANSISTOR		
	Q 765	FN1L4M	TRANSISTOR		
	Q 771	FN1A4MX	TRANSISTOR		
	Q 772	2SD1048X-6HL	TRANSISTOR		
	Q 801	FN1L4M	TRANSISTOR		
	Q 821	2SC1623(6)	TRANSISTOR		
	Q 841	2SC1623(6)	TRANSISTOR		
	Q 842	2SC1623(6)	TRANSISTOR		
	Q 843	2SC1623(6)	TRANSISTOR		
	Q 844	2SC1623(6)	TRANSISTOR		
	Q 845	FA1L4Z	TRANSISTOR		
	Q 846	2SC1623(6)	TRANSISTOR		
	Q 847	FN1L4M	TRANSISTOR		
	Q 848	FN1L4M	TRANSISTOR		
	Q 850	2SB624(4)	TRANSISTOR		
	Q 851	2SB624(4)	TRANSISTOR		
	Q 852	2SC1623(6)	TRANSISTOR		
	Q 853	2SC1623(6)	TRANSISTOR		
	Q 854	2SD601A(RS)	TRANSISTOR		
	Q 941	2SD601A(RS)	TRANSISTOR		
	Q 971	2SD601A(RS)	TRANSISTOR		
	Q 972	2SD601A(RS)	TRANSISTOR		
	Q 991	2SD601A(RS)	TRANSISTOR		
	R 111	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 112	NRSA02J-243NY	EC CAPACITOR	24K 5% 1/10W	
	R 113	NRSA02J-561NY	MG RESISTOR	560 5% 1/10W	
	R 114	NRSA02J-183NY	MG RESISTOR	18K 5% 1/10W	
	R 115	NRSA02J-822NY	MG RESISTOR	8.2K 5% 1/10W	
	R 121	NRSA02J-ORONY	MG RESISTOR	5% 1/10W	
	R 122	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 124	NRSA02J-471NY	MG RESISTOR	470 5% 1/10W	
	R 125	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 130	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 131	NRSA02J-474NY	MG RESISTOR	470K 5% 1/10W	
	R 132	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 133	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 134	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 141	NRSA02J-682NY	MG RESISTOR	6.8K 5% 1/10W	
	R 142	NRSA02J-105NY	MG RESISTOR	1.0M 5% 1/10W	
	R 143	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 144	NRSA02J-152NY	MG RESISTOR	1.5K 5% 1/10W	
	R 145	NRSA02J-105NY	MG RESISTOR	1.0M 5% 1/10W	
	R 146	NRSA02J-105NY	MG RESISTOR	1.0M 5% 1/10W	
	R 147	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 148	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 149	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 161	NRSA02J-105NY	MG RESISTOR	1.0M 5% 1/10W	
	R 162	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 163	NRSA02J-682NY	MG RESISTOR	6.8K 5% 1/10W	
	R 164	NRSA02J-471NY	MG RESISTOR	470 5% 1/10W	
	R 165	NRSA02J-105NY	MG RESISTOR	1.0M 5% 1/10W	
	R 166	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 167	NRSA02J-682NY	MG RESISTOR	6.8K 5% 1/10W	
	R 168	NRSA02J-471NY	MG RESISTOR	470 5% 1/10W	
	R 169	NRSA02J-272NY	MG RESISTOR	2.7K 5% 1/10W	
	R 170	NRSA02J-152NY	MG RESISTOR	1.5K 5% 1/10W	
	R 172	NRSA02J-152NY	MG RESISTOR	1.5K 5% 1/10W	
	R 173	NRSA02J-272NY	MG RESISTOR	2.7K 5% 1/10W	
	R 181	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 182	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 184	NRSA02K-2R2NY	MF RESISTOR	2.2 10% 1/10W	
	R 185	NRSA02K-2R2NY	MF RESISTOR	2.2 10% 1/10W	
	R 186	NRSA02K-2R2NY	MF RESISTOR	2.2 10% 1/10W	
	R 187	NRSA02K-2R2NY	MF RESISTOR	2.2 10% 1/10W	
	R 211	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 212	NRSA02J-243NY	EC CAPACITOR	24K 5% 1/10W	
	R 213	NRSA02J-561NY	MG RESISTOR	560 5% 1/10W	
	R 214	NRSA02J-183NY	MG RESISTOR	18K 5% 1/10W	
	R 215	NRSA02J-822NY	MG RESISTOR	8.2K 5% 1/10W	
	R 221	NRSA02J-ORONY	MG RESISTOR	5% 1/10W	
	R 222	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 224	NRSA02J-471NY	MG RESISTOR	470 5% 1/10W	
	R 225	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 230	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 231	NRSA02J-474NY	MG RESISTOR	470K 5% 1/10W	
	R 232	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 233	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 234	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 241	NRSA02J-682NY	MG RESISTOR	6.8K 5% 1/10W	
	R 242	NRSA02J-105NY	MG RESISTOR	1.0M 5% 1/10W	
	R 243	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 244	NRSA02J-152NY	MG RESISTOR	1.5K 5% 1/10W	
	R 245	NRSA02J-105NY	MG RESISTOR	1.0M 5% 1/10W	
	R 246	NRSA02J-105NY	MG RESISTOR	1.0M 5% 1/10W	
	R 247	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 248	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 249	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 261	NRSA02J-105NY	MG RESISTOR	1.0M 5% 1/10W	
	R 262	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 263	NRSA02J-682NY	MG RESISTOR	6.8K 5% 1/10W	
	R 264	NRSA02J-471NY	MG RESISTOR	470 5% 1/10W	
	R 265	NRSA02J-105NY	MG RESISTOR	1.0M 5% 1/10W	
	R 266	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 267	NRSA02J-682NY	MG RESISTOR	6.8K 5% 1/10W	
	R 268	NRSA02J-471NY	MG RESISTOR	470 5% 1/10W	
	R 269	NRSA02J-272NY	MG RESISTOR	2.7K 5% 1/10W	
	R 270	NRSA02J-152NY	MG RESISTOR	1.5K 5% 1/10W	
	R 272	NRSA02J-152NY	MG RESISTOR	1.5K 5% 1/10W	
	R 273	NRSA02J-272NY	MG RESISTOR	2.7K 5% 1/10W	
	R 281	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 282	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 284	NRSA02K-2R2NY	MF RESISTOR	2.2 10% 1/10W	
	R 285	NRSA02K-2R2NY	MF RESISTOR	2.2 10% 1/10W	
	R 286	NRSA02K-2R2NY	MF RESISTOR	2.2 10% 1/10W	
	R 287	NRSA02K-2R2NY	MF RESISTOR	2.2 10% 1/10W	
	R 331	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 332	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 333	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 341	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 342	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 343	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 344	NRSA02J-123NY	MG RESISTOR	12K 5% 1/10W	
	R 345	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 346	NRSA02J-123NY	MG RESISTOR	12K 5% 1/10W	
	R 347	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 351	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 352	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 353	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 354	NRSA02J-123NY	MG RESISTOR	12K 5% 1/10W	
	R 355	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 356	NRSA02J-123NY	MG RESISTOR	12K 5% 1/10W	
	R 357	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 431	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 432	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 433	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 441	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 442	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 443	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 444	NRSA02J-123NY	MG RESISTOR	12K 5% 1/10W	
	R 445	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 446	NRSA02J-123NY	MG RESISTOR	12K 5% 1/10W	
	R 447	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 451	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 452	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 453	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 454	NRSA02J-123NY	MG RESISTOR	12K 5% 1/10W	
	R 455	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 456	NRSA02J-123NY	MG RESISTOR	12K 5% 1/10W	
	R 457	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 551	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 552	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 553	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 554	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 555	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 556	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 557	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 558	NRSA02J-334NY	MG RESISTOR	330K 5% 1/10W	
	R 559	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 601	NRSA02J-471NY	MG RESISTOR	470 5% 1/10W	
	R 602	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 603	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 611	NRSA02J-471NY	MG RESISTOR	470 5% 1/10W	
	R 612	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 613	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 703	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 708	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 710	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 711	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 712	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 713	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 714	NRSA02J-334NY	MG RESISTOR	330K 5% 1/10W	
	R 715	NRSA02J-101NY	MG RESISTOR	100 5% 1/10W	
	R 716	NRSA02J-101NY	MG RESISTOR	100 5% 1/10W	
	R 717	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 718	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 719	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 720	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 721	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 722	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 723	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 724	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 725	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 726	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 727	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 728	NRSA02J-182NY	MG RESISTOR	1.8K 5% 1/10W	
	R 729	NRSA02J-182NY	MG RESISTOR	1.8K 5% 1/10W	
	R 730	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 731	NRSA02J-392NY	MG RESISTOR	3.9K 5% 1/10W	
	R 732	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 733	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 734	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 735	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 736	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 737	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 738	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 739	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 740	NRSA02J-182NY	MG RESISTOR	1.8K 5% 1/10W	
	R 741	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 742	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 743	NRSA02J-682NY	MG RESISTOR	6.8K 5% 1/10W	
	R 744	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 745	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 746	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 747	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 748	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 749	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 751	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 752	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 753	NRS181J-221NY	MG RESISTOR	220 5% 1/8W	
	R 754	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 755	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 756	NRSA02J-471NY	MG RESISTOR	470 5% 1/10W	
	R 757	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 758	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 759	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 760	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 761	NRSA02J-393NY	MG RESISTOR	39K 5% 1/10W	
	R 762	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 763	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 764	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 765	NRS181J-821NY	MG RESISTOR	820 5% 1/8W	
	R 766	NRSA02J-273NY	MG RESISTOR	27K 5% 1/10W	
	R 767	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 768	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 769	NRS181J-221NY	MG RESISTOR	220 5% 1/8W	
	R 770	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 771	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 772	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 773	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 801	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 802	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 803	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 804	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 805	NRSA02J-334NY	MG RESISTOR	330K 5% 1/10W	
	R 806	NRSA02J-101NY	MG RESISTOR	100 5% 1/10W	
	R 807	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 808	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 809	NRSA02J-101NY	MG RESISTOR	100 5% 1/10W	
	R 810	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 811	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 812	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 813	NRSA02J-154NY	MG RESISTOR	150K 5% 1/10W	
	R 814	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 815	NRSA02J-101NY	MG RESISTOR	100 5% 1/10W	
	R 816	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 817	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 821	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 822	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 831	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 841	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 842	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 843	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 844	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 845	NRSA02J-681NY	MG RESISTOR	680 5% 1/10W	
	R 846	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 847	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 848	NRSA02J-471NY	MG RESISTOR	470 5% 1/10W	
	R 849	NRSA02J-152NY	MG RESISTOR	1.5K 5% 1/10W	
	R 850	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 851	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 852	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 853	NRS181J-681NY	MG RESISTOR	680 5% 1/8W	

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 854	NRSA02J-474NY	MG RESISTOR	470K 5% 1/10W	
	R 855	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 856	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 857	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 858	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 859	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 860	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 861	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 864	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 865	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 866	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 867	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 868	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 869	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 870	NRSA02J-393NY	MG RESISTOR	39K 5% 1/10W	
	R 871	NRSA02J-823NY	MG RESISTOR	82K 5% 1/10W	
	R 872	NRSA02J-823NY	MG RESISTOR	82K 5% 1/10W	
	R 873	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 874	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 875	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 876	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 877	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 878	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 879	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 880	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 881	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 882	NRSA02J-474NY	MG RESISTOR	470K 5% 1/10W	
	R 889	NRSA02J-183NY	MG RESISTOR	18K 5% 1/10W	
	R 904	NRSA02J-100NY	MG RESISTOR	10 5% 1/10W	
	R 911	NRSA02J-682NY	MG RESISTOR	6.8K 5% 1/10W	
	R 912	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 913	NRSA02J-273NY	MG RESISTOR	27K 5% 1/10W	
	R 921	NRSA02J-100NY	MG RESISTOR	10 5% 1/10W	
	R 922	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 923	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 931	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/1QW	
	R 932	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 933	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 941	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 942	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 943	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 944	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 971	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 972	NRSA02J-333NY	MG RESISTOR	33K 5% 1/10W	
	R 973	NRSA02J-333NY	MG RESISTOR	33K 5% 1/10W	
	R 974	NRSA02J-123NY	MG RESISTOR	12K 5% 1/10W	
	R 975	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 976	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 977	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 978	NRSA02J-471NY	MG RESISTOR	470 5% 1/10W	
	R 979	NRSA02J-471NY	MG RESISTOR	470 5% 1/10W	
	R 980	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 981	NRSA02J-471NY	MG RESISTOR	470 5% 1/10W	
	R 982	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	R 983	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 984	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 985	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 991	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 992	NRSA02J-682NY	MG RESISTOR	6.8K 5% 1/10W	
	R 993	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
	RY751	VSK1D12-118	RELAY		
	TP841	VMC0135-003	CONNECTOR		
	TP911	VMC0135-002	CONNECTOR		
	VR111	QVZ3523-223	SEMI V RESISTOR		
	VR112	QVZ3523-223	SEMI V RESISTOR		
	VR211	QVZ3523-223	SEMI V RESISTOR		
	VR212	QVZ3523-223	SEMI V RESISTOR		
	VR861	QVZ3523-154AZ	V RESISTOR		
	VR862	QVZ3523-154AZ	V RESISTOR		
	X 701	VCX5024-001	CRYSTAL		
	X 831	VCX5057-001	CRYSTAL		
	X 841	VCX5025-001	CRYSTAL		

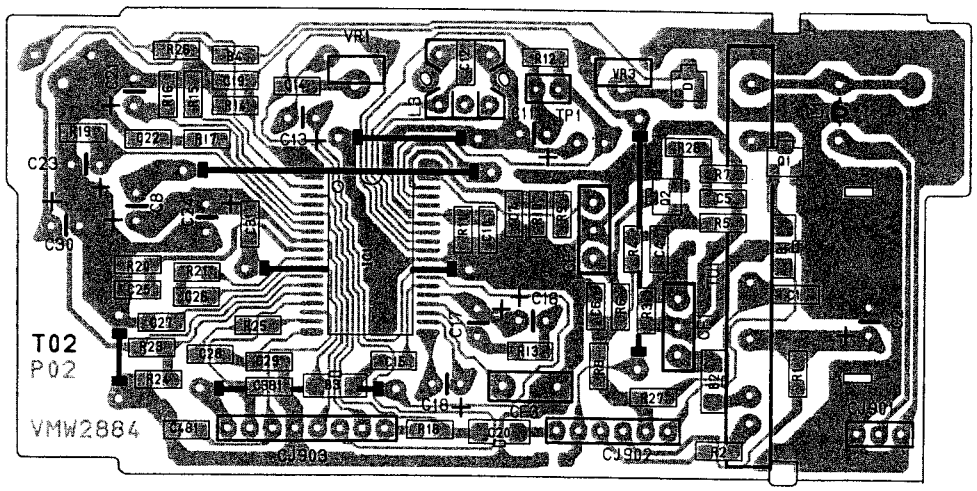
⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 731	NEF20JM-106RY	TSE.CAP SVB20J	10MF 20% 6.3V	
	CJ731	VMC0305-003	CONNECTOR		
	CJ732	VMC0305-003	CONNECTOR		
	CJ930	VMC0278-001	CONNECTOR		
	CP929	VMC0232-P16	CONNECTOR		
	D 731	MA3062(M)	ZENER DIODE		
	D 732	MA3062(M)	ZENER DIODE		
	D 733	MA3062(M)	ZENER DIODE		
	D 734	MA3062(M)	ZENER DIODE		
	D 735	MA3062(M)	ZENER DIODE		
	D 736	MA3062(M)	ZENER DIODE		
	D 739	MA3062(M)	ZENER DIODE		
	D 740	MA3062(M)	ZENER DIODE		
	D 741	MA3062(M)	ZENER DIODE		
	IC731	BX-1408	IC	REMOTE SENSOR	
	R 750	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	S 578	QSQ1B11-V01Z	TACT SWITCH		

Parts List LDC-PCB

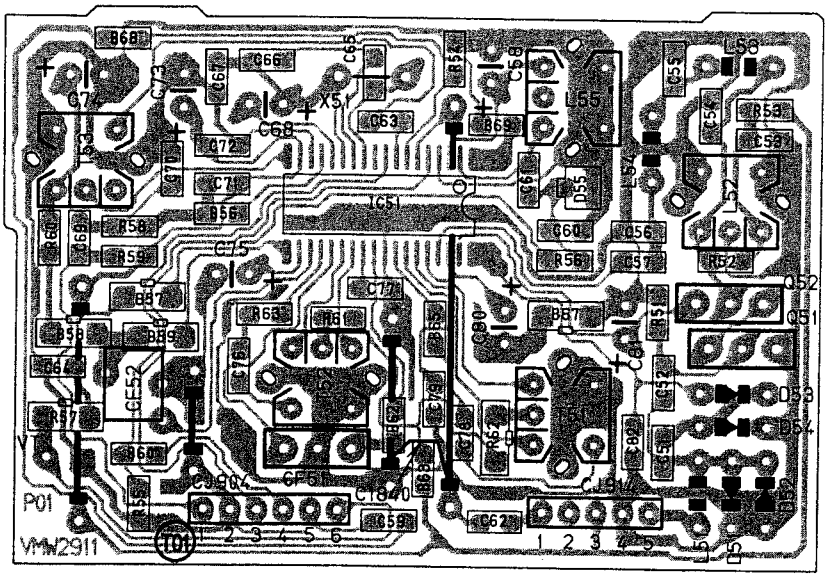
⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 521	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 522	NEF20JM-475RY	TS E CAPACITOR	4.7MF 20% 6.3V	
	C 523	NCS21HJ-681AY	C CAPACITOR	680PF 5% 50V	
	CP930	VMC0259-001	CONNECTOR		
	D 521	HSM2838C	DIODE		
	D 522	HSM2838C	DIODE		
	D 523	HSM2836C	DIODE		
	D 524	HSM2836C	DIODE		
	D 525	HSM2838C	DIODE		
	D 561	CL-155YPG-D-T	LED		
	D 562	CL-155YPG-D-T	LED		
	D 563	CL-155YPG-D-T	LED		
	D 564	CL-155YPG-D-T	LED		
	D 565	CL-155YPG-D-T	LED		
	D 566	CL-155YPG-D-T	LED		
	D 567	CL-155YPG-D-T	LED		
	D 568	CL-155YPG-D-T	LED		
	D 569	CL-155YPG-D-T	LED		
	D 570	CL-155YPG-D-T	LED		
	D 571	CL-155YPG-D-T	LED		
	D 572	CL-155YPG-D-T	LED		
	D 573	CL-155YPG-D-T	LED		
	D 574	CL-155YPG-D-T	LED		
	D 575	CL-155YPG-D-T	LED		
	D 576	CL-155YPG-D-T	LED		
	D 577	CL-155YPG-D-T	LED		
	D 578	CL-155YPG-D-T	LED		
	D 579	CL-155YPG-D-T	LED		
	D 580	CL-155YPG-D-T	LED		
	D 581	CL-155YPG-D-T	LED		
	D 582	CL-155YPG-D-T	LED		
	IC531	LC75850E	IC		
	L 521	VQP1003-270Y	INDUCTOR		
	LCD 1	LCD8275JH	LCD		
	PL561	VGZ0001-045	LAMP		
	PL562	VGZ0001-045	LAMP		
	PL564	VGZ0001-037	LAMP		
	PL565	VGZ0001-037	LAMP		
	R 521	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 522	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 523	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 524	NRSA02J-154NY	MG RESISTOR	150K 5% 1/10W	
	R 525	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 561	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
	R 562	NRSA02J-561NY	MG RESISTOR	560 5% 1/10W	
	R 563	NRSA02J-821NY	MG RESISTOR	820 5% 1/10W	
	R 564	NRSA02J-122NY	MG RESISTOR	1.2K 5% 1/10W	
	R 565	NRSA02J-182NY	MG RESISTOR	1.8K 5% 1/10W	
	R 566	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
	R 567	NRSA02J-561NY	MG RESISTOR	560 5% 1/10W	
	R 568	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
	R 569	NRSA02J-561NY	MG RESISTOR	560 5% 1/10W	
	R 570	NRSA02J-821NY	MG RESISTOR	820 5% 1/10W	
	R 571	NRSA02J-122NY	MG RESISTOR	1.2K 5% 1/10W	
	R 572	NRSA02J-182NY	MG RESISTOR	1.8K 5% 1/10W	

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 573	NRSA02J-392NY	MG RESISTOR	3.9K 5% 1/10W	
	R 574	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 575	NRS181J-681NY	MG RESISTOR	680 5% 1/8W	
	R 576	NRS181J-681NY	MG RESISTOR	680 5% 1/8W	
	R 577	NRS181J-681NY	MG RESISTOR	680 5% 1/8W	
	R 578	NRS181J-681NY	MG RESISTOR	680 5% 1/8W	
	R 579	NRS181J-681NY	MG RESISTOR	680 5% 1/8W	
	R 580	NRS181J-681NY	MG RESISTOR	680 5% 1/8W	
	R 581	NRS181J-681NY	MG RESISTOR	680 5% 1/8W	
	R 582	NRS181J-681NY	MG RESISTOR	680 5% 1/8W	
	R 583	NRS181J-681NY	MG RESISTOR	680 5% 1/8W	
	R 584	NRS181J-681NY	MG RESISTOR	680 5% 1/8W	
	R 585	NRS181J-681NY	MG RESISTOR	680 5% 1/8W	
	R 586	NRS181J-681NY	MG RESISTOR	680 5% 1/8W	
	R 587	NRS181J-681NY	MG RESISTOR	680 5% 1/8W	
	R 588	NRS181J-681NY	MG RESISTOR	680 5% 1/8W	
	R 589	NRS181J-102NY	MG RESISTOR	1.0K 5% 1/8W	
	R 590	NRS181J-102NY	MG RESISTOR	1.0K 5% 1/8W	
	R 591	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 592	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 593	NRSA02J-821NY	MG RESISTOR	820 5% 1/10W	
	S 561	QSQ1B11-V01Z	TACT SWITCH		
	S 562	QSQ1B11-V01Z	TACT SWITCH		
	S 563	QSQ1B11-V01Z	TACT SWITCH		
	S 564	QSQ1B11-V01Z	TACT SWITCH		
	S 565	QSQ1B11-V01Z	TACT SWITCH		
	S 566	QSQ1B11-V01Z	TACT SWITCH		
	S 567	QSQ1B11-V01Z	TACT SWITCH		
	S 568	QSQ1B11-V01Z	TACT SWITCH		
	S 569	QSQ1B11-V01Z	TACT SWITCH		
	S 570	QSQ1B11-V01Z	TACT SWITCH		
	S 571	QSQ1B11-V01Z	TACT SWITCH		
	S 572	QSQ1B11-V01Z	TACT SWITCH		
	S 573	QSQ1B11-V01Z	TACT SWITCH		
	S 574	QSQ1B11-V01Z	TACT SWITCH		
	S 575	QSQ1B11-V01Z	TACT SWITCH		
	S 576	QSQ1B11-V01Z	TACT SWITCH		
	S 577	QSQ1B11-V01Z	TACT SWITCH		
	VR561	VGZ0140-001	R ENCODER		

7.4 TUNER P.C.-BOARDS AM/FM



■ AM P.C. Board



PARTS LIST TUNER P.C.-BOARD / MECHANISM CONTROL P.C.-BOARD (P.31)

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	B 1	NRS181J-ORONY	MG RESISTOR	5% 1/8W	
	B 2	NRS181J-ORONY	MG RESISTOR	5% 1/8W	
	B 3	NRS181J-ORONY	MG RESISTOR	5% 1/8W	
	B 4	NRSA02J-ORONY	MG RESISTOR	5% 1/10W	
	B 56	NRSA02J-ORONY	MG RESISTOR	5% 1/10W	
	B 57	NRS181J-ORONY	MG RESISTOR	5% 1/8W	
	B 58	NRS181J-ORONY	MG RESISTOR	5% 1/8W	
	B 59	NRS181J-ORONY	MG RESISTOR	5% 1/8W	
	B 60	NRSA02J-ORONY	MG RESISTOR	5% 1/10W	
	B 62	NRSA02J-ORONY	MG RESISTOR	5% 1/10W	
	B 63	NRSA02J-ORONY	MG RESISTOR	5% 1/10W	
	B 65	NRSA02J-ORONY	MG RESISTOR	5% 1/10W	
	B 67	NRS181J-ORONY	MG RESISTOR	5% 1/8W	
	B 68	NRSA02J-ORONY	MG RESISTOR	5% 1/10W	
	B 69	NRSA02J-ORONY	MG RESISTOR	5% 1/10W	
	B 881	NRS181J-ORONY	MG RESISTOR	5% 1/8W	
	B 882	NRS181J-ORONY	MG RESISTOR	5% 1/8W	
	B 883	NRS181J-ORONY	MG RESISTOR	5% 1/8W	
	B 884	NRS181J-ORONY	MG RESISTOR	5% 1/8W	
	B 885	NRSA02J-ORONY	MG RESISTOR	5% 1/10W	
	B 886	NRS181J-ORONY	MG RESISTOR	5% 1/8W	
	B 887	NRS181J-ORONY	MG RESISTOR	5% 1/8W	
	B 888	NRS181J-ORONY	MG RESISTOR	5% 1/8W	
	B 891	NRS181J-ORONY	MG RESISTOR	5% 1/8W	
	B 892	NRS181J-ORONY	MG RESISTOR	5% 1/8W	
	B 893	NRS181J-ORONY	MG RESISTOR	5% 1/8W	
	B 894	NRS181J-ORONY	MG RESISTOR	5% 1/8W	
	B 896	NRS181J-ORONY	MG RESISTOR	5% 1/8W	
	B 897	NRS181J-ORONY	MG RESISTOR	5% 1/8W	
	C 1	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 2	QEK41HM-104	E CAPACITOR	.10MF 20% 50V	
	C 4	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 5	NCB21EK-473AY	C CAPACITOR	.047MF 10% 25V	
	C 6	NCB21EK-473AY	C CAPACITOR	.047MF 10% 25V	
	C 7	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 8	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C 9	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C 10	NCB21HK-102AY	C CAPACITOR	1000PF 10% 50V	
	C 11	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C 12	NCT21CH-120AY	C CAPACITOR	12PF +50:-10% 1	
	C 13	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C 14	NCB21HK-182AY	C CAPACITOR	1800PF 10% 50V	
	C 15	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 16	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C 17	QEK41HM-224	E CAPACITOR	.22MF 20% 50V	
	C 18	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C 19	NCB21EK-473AY	C CAPACITOR	.047MF 10% 25V	
	C 20	QCS81HK-471Y	C CAPACITOR	470PF 10% 50V	
	C 21	QEK41HM-224	E CAPACITOR	.22MF 20% 50V	
	C 22	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 23	QEK41CM-226	E CAPACITOR	22MF 20% 16V	
	C 24	QEK41CM-476	E CAPACITOR	47MF 20% 16V	
	C 25	NCS21HJ-681AY	C CAPACITOR	680PF 5% 50V	
	C 26	NCB21HK-682AY	C CAPACITOR	6800PF 10% 50V	
	C 27	NCB21HK-472AY	C CAPACITOR	4700PF 10% 50V	

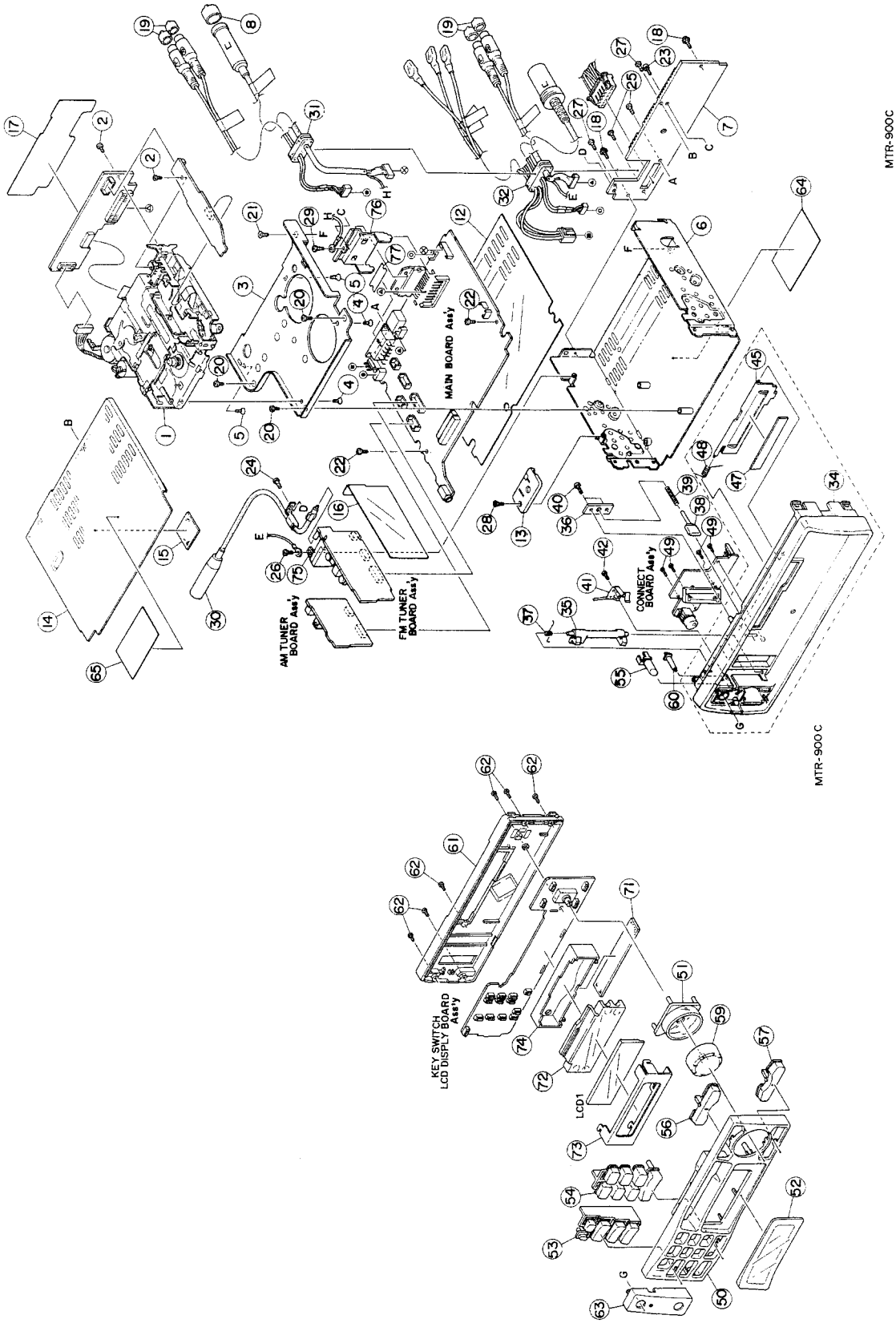
⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 28	NCB21HK-332AY	C CAPACITOR	3300PF 10% 50V	
	C 29	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 30	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C 31	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 51	NCB21HK-222AY	C CAPACITOR	2200PF 10% 50V	
	C 52	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 53	NCB21HK-473AY	C CAPACITOR	.047MF 10% 50V	
	C 54	NCS21HJ-470AY	C CAPACITOR	47PF 5% 50V	
	C 55	NCS21HJ-151AY	C CAPACITOR	150PF 5% 50V	
	C 56	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
	C 57	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 58	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C 59	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 60	NCS21HJ-470AY	C CAPACITOR	47PF 5% 50V	
	C 61	NCS21HJ-331AY	C CAPACITOR	330PF 5% 50V	
	C 62	NCB21HK-102AY	C CAPACITOR	1000PF 10% 50V	
	C 63	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 64	NCB21EK-683AY	C CAPACITOR	.068MF 10% 25V	
	C 65	NCT21CH-150AY	C CAPACITOR	15PF +50:-10% 1	
	C 66	NCT21CH-470AY	C CAPACITOR	47PF +50:-10% 1	
	C 67	NCB21HK-473AY	C CAPACITOR	.047MF 10% 50V	
	C 68	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C 69	NCB21HK-333AY	C CAPACITOR	.033MF 10% 50V	
	C 70	NCB21HK-333AY	C CAPACITOR	.033MF 10% 50V	
	C 71	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 72	NCB21HK-473AY	C CAPACITOR	.047MF 10% 50V	
	C 73	QEK41CM-476	E CAPACITOR	47MF 20% 16V	
	C 74	QER41HM-225	E CAPACITOR	2.2MF 20% 50V	
	C 75	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
	C 76	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 77	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 78	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 79	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 80	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C 81	QEK41CM-476	E CAPACITOR	47MF 20% 16V	
	C 82	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
	C 301	NCS21HJ-471AY	C CAPACITOR	470PF 5% 50V	
	C 302	NCS21HJ-471AY	C CAPACITOR	470PF 5% 50V	
	C 303	QER41CM-226VM	E CAPACITOR	22MF 20% 16V	
	C 304	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 381	NCB21EK-223AY	C CAPACITOR	.022MF 10% 25V	
	C 401	NCS21HJ-471AY	C CAPACITOR	470PF 5% 50V	
	C 402	NCS21HJ-471AY	C CAPACITOR	470PF 5% 50V	
	C 403	QER41CM-226VM	E CAPACITOR	22MF 20% 16V	
	C 404	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 481	NCB21EK-223AY	C CAPACITOR	.022MF 10% 25V	
	C 881	QER41CM-106M	E CAPACITOR	10MF 20% 16V	
	C 882	QER41AM-107	E CAPACITOR	100MF 20% 10V	
	C 883	QER41CM-226VM	E CAPACITOR	22MF 20% 16V	
	C 891	NCB21EK-104AY	C CAPACITOR	.10MF 10% 25V	
	C 892	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	C 983	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
	CF 1	VCF2S3B-102	C FILTER		
	CF 2	VCF2S3B-102	C FILTER		
	CF 3	CSB456F23	CERA LOCK		

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	CF 51	VCF2S3B-102	C FILTER		
	CF 52	VCF4E3D-101	C FILTER		
	CJ881	VMC0115-005	CONNECTOR		
	CJ882	VMC0136-007	CONNECTOR		
	CJ891	VMC0115-010	CONNECTOR		
	CJ901	VMC0136-003	CONNECTOR		
	CJ902	VMC0136-006	CONNECTOR		
	CJ903	VMC0136-008	CONNECTOR		
	CJ904	VMC0136-006	CONNECTOR		
	CJ914	VMC0136-005	CONNECTOR		
	CJ922	VMZ0075-001V	COAXIAL CONNECT		
	CJ925	VMC0232-S18	CONNECTOR		
	CP882	VMC0135-007	CONNECTOR		
	CP892	VMC0282-R07	CONNECTOR		
	D 1	HSM2838C	DIODE		
	D 51	1SS133	DIODE		
	D 52	1SS133	DIODE		
	D 53	1SV121	PIN DIODE		
	D 54	1SV121	PIN DIODE		
	D 55	KV1410TL	VARI CAP		
	D 881	MA3091(M)	ZENER DIODE		
	D 882	HSM2838C	DIODE		
	D 891	DSK10C-E	DIODE		
	D 892	DSK10C-E	DIODE		
	D 893	DSK10C-E	DIODE		
	D 894	DSK10C-E	DIODE		
	D 895	MA3043(L)	ZENER DIODE		
	D 896	HSM2838C	DIODE		
	D 897	HSM2838C	DIODE		
	IC 1	LA1862M	IC		
	IC 51	UPC2533GS	IC		
	IC881	TA7705F	IC		
	IC891	LB1641	IC		
	L 1	VQP0015-4R7Z	INDUCTOR		
	L 3	VQT7F07-504	IFT		
	L 51	VQP025K-4R7Y	INDUCTOR		
	L 52	VQZ0076-001	PEAKING COIL		
	L 53	VQP025K-120	INDUCTOR		
	L 54	VQP025K-120	INDUCTOR		
	L 55	VQZ0087-001	OSC COIL		
	Q 1	FA1L4M	TRANSISTOR		
	Q 2	2SC2223(13)	TRANSISTOR		
	Q 51	2SK1000(EFH)-T	FET		
	Q 52	2SC1740S(R,S)	TRANSISTOR		
	Q 881	FA1L4M	TRANSISTOR		
	Q 883	2SD638(R,S)	TRANSISTOR		
	Q 891	2SB643	TRANSISTOR		
	Q 892	2SD638(R,S)	TRANSISTOR		
	Q 893	2SB643	TRANSISTOR		
	Q 894	2SD638(R,S)	TRANSISTOR		
	Q 895	FA1A4M	TRANSISTOR		
	Q 896	FA1A4M	TRANSISTOR		
	Q 897	2SD596(4)	TRANSISTOR		
	Q 898	2SB643	TRANSISTOR		
	R 1	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 2	NRSA02J-121NY	MG RESISTOR	120 5% 1/10W	
	R 3	NRSA02J-391NY	MG RESISTOR	390 5% 1/10W	
	R 4	NRSA02J-203NY	MG REGISTOR	20K 5% 1/10W	
	R 5	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 6	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
	R 7	NRSA02J-182NY	MG RESISTOR	1.8K 5% 1/10W	
	R 8	NRSA02J-221NY	MG RESISTOR	220 5% 1/10W	
	R 9	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
	R 10	NRSA02J-392NY	MG RESISTOR	3.9K 5% 1/10W	
	R 11	NRSA02J-333NY	MG RESISTOR	33K 5% 1/10W	
	R 12	NRSA02J-123NY	MG RESISTOR	12K 5% 1/10W	
	R 13	NRSA02J-562NY	MG RESISTOR	5.6K 5% 1/10W	
	R 14	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 15	NRSA02J-182NY	MG RESISTOR	1.8K 5% 1/10W	
	R 16	NRSA02J-562NY	MG RESISTOR	5.6K 5% 1/10W	
	R 17	NRSA02J-683NY	MG RESISTOR	68K 5% 1/10W	
	R 18	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 19	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 20	NRSA02J-682NY	MG RESISTOR	6.8K 5% 1/10W	
	R 21	NRSA02J-752NY	MG RESISTOR	7.5K 5% 1/10W	
	R 23	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 24	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 25	NRSA02J-273NY	MG RESISTOR	27K 5% 1/10W	
	R 26	NRSA02J-562NY	MG RESISTOR	5.6K 5% 1/10W	
	R 27	NRSA02J-150NY	MG RESISTOR	15 5% 1/10W	
	R 28	NRSA02J-330NY	MG RESISTOR	33 5% 1/10W	
	R 51	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 52	NRSA02J-471NY	MG RESISTOR	470 5% 1/10W	
	R 53	NRSA02J-220NY	MG RESISTOR	22 5% 1/10W	
	R 54	NRSA02J-224NY	MG RESISTOR	220K 5% 1/10W	
	R 55	NRSA02J-474NY	MG RESISTOR	470K 5% 1/10W	
	R 56	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 57	NRS181J-102NY	MG RESISTOR	1.0K 5% 1/8W	
	R 58	NRSA02J-272NY	MG RESISTOR	2.7K 5% 1/10W	
	R 59	NRSA02J-683NY	MG RESISTOR	68K 5% 1/10W	
	R 60	NRSA02J-182NY	MG RESISTOR	1.8K 5% 1/10W	
	R 61	NRSA02J-470NY	MG RESISTOR	47 5% 1/10W	
	R 62	NRS181J-470NY	MG RESISTOR	47 5% 1/8W	
	R 63	NRSA02J-683NY	MG RESISTOR	68K 5% 1/10W	
	R 64	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R 301	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 302	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 303	NRSA02J-221NY	MG RESISTOR	220 5% 1/10W	
	R 304	NRSA02J-334NY	MG RESISTOR	330K 5% 1/10W	
	R 305	NRSA02J-183NY	MG RESISTOR	18K 5% 1/10W	
	R 306	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 401	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 402	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
	R 403	NRSA02J-221NY	MG RESISTOR	220 5% 1/10W	
	R 404	NRSA02J-334NY	MG RESISTOR	330K 5% 1/10W	
	R 405	NRSA02J-183NY	MG RESISTOR	18K 5% 1/10W	
	R 406	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 881	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 882	NRS181J-473NY	MG RESISTOR	47K 5% 1/8W	
	R 884	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 885	NRS181J-473NY	MG RESISTOR	47K 5% 1/8W	
	R 886	NRS181J-473NY	MG RESISTOR	47K 5% 1/8W	
	R 887	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 888	NRSA02J-0R0NY	MG RESISTOR	5% 1/10W	
	R 889	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 891	NRS181J-102NY	MG RESISTOR	1.0K 5% 1/8W	
	R 892	NRS181J-102NY	MG RESISTOR	1.0K 5% 1/8W	
	R 893	NRS181J-102NY	MG RESISTOR	1.0K 5% 1/8W	
	R 894	NRS181J-102NY	MG RESISTOR	1.0K 5% 1/8W	
	R 895	QRG016J-120A	OMF RESISTOR	12 5% 1/1W	
	R 896	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 897	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 898	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 899	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	T 51	VQT7F11-101	IFT		
	T 52	VQT7A11-210	IFT		
	T 53	VQT7A11-303	IFT		
	TP 1	VMC0075-R02N	CONNECTOR		
	TU 1	VAF2S07-301	FM FRONT END		
	VR 1	QVPA603-333A	SEMI.V.RESISTOR		
	VR 3	QVPA603-154A	SEMI.V.RESISTOR		
	X 51	VCX5058-001	CRYSTAL		

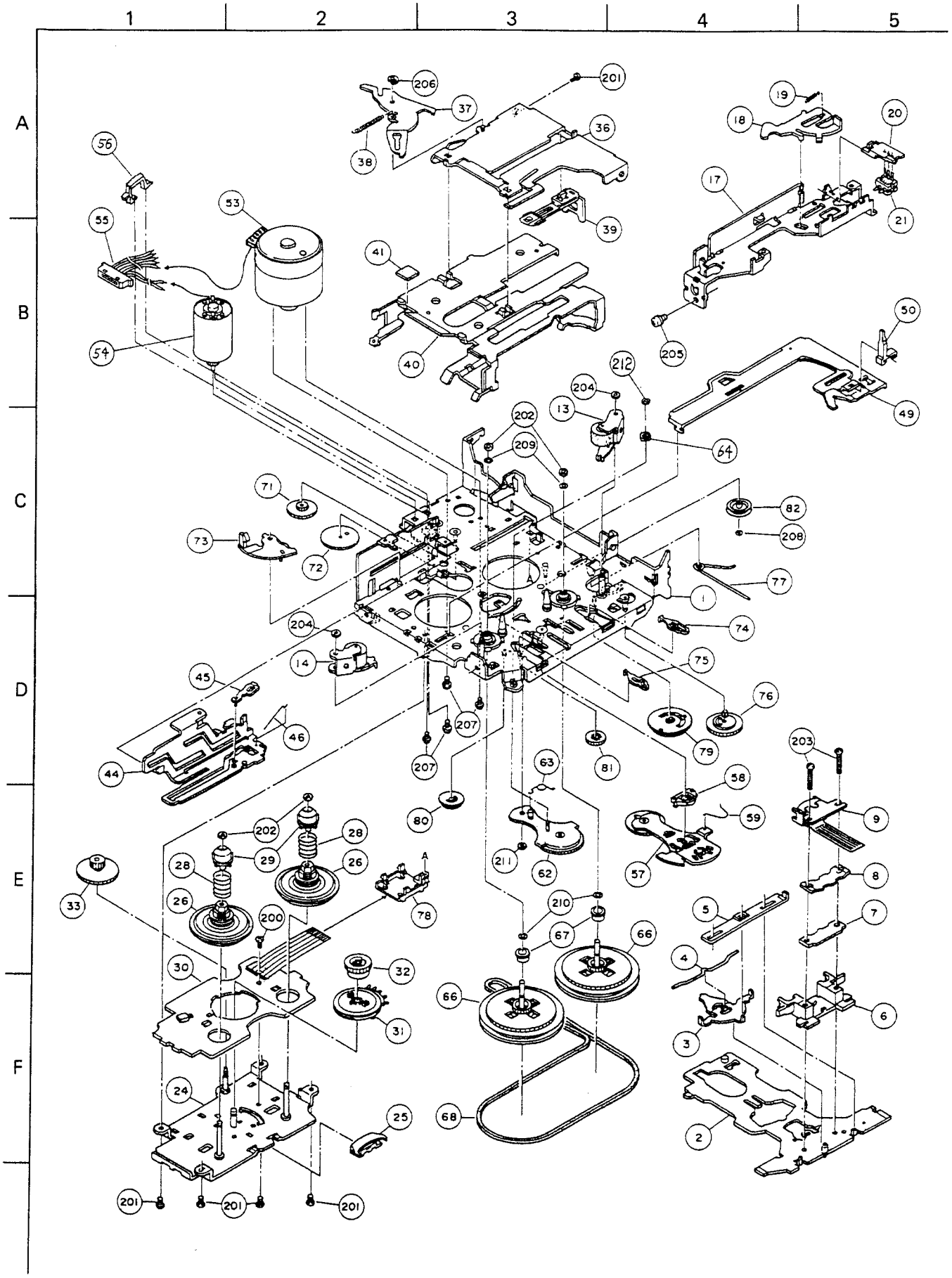
8. EXPLODED VIEW OF ENCLOSURE COMPONENT PARTS AND PARTS LIST



⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX
	A	ZCMTR900C-NPA	FRONT PANEL ASY	NO.50,52	1	
	B	ZCMTR900C-FB	FRONT CHASSIS	NO.34,45,47,48	1	
	1	VDL3463-001M	RT80 MECHA		1	
	2	SDST2004Z	SCREW		2	
	3	VKL2633-002	MECHA.BKT		1	
	4	SSSP3005Z	SCREW	MECHA+M.BKT	2	
	5	SSSP3005Z	SCREW	MECHA+M.BKT	2	
	6	VKL1352-001	CHASSIS		1	
	7	VJC3253-001	REAR PANEL		1	
	8	VYTA496-001T	DIN CAP		1	
	12	VMA3199-002	INSULATOR		1	
	13	VKS3634-002	TUNER HOLDER	FM/AM TUNER PWB	1	
	14	VKM3613-004	TOP COVER		1	
	15	VYSS1R5-068	SPACER		1	
	16	VMA4511-002	INSULATOR		1	
	17	VMA4510-002	INSULATOR	MECHA+REAR PANE	1	
	18	VKZ4345-005	SPECIAL SCREW	SIDE L,R+REAR	2	
	19	VYTA500-001	PIN CAP		4	
	20	SDSP2606Z	SCREW	M.BKT+CHASSIS	3	
	21	SSST2606Z	SCREW	M.BKT+CHASSIS	1	
	22	SDSP2604Z	SCREW	MAIN PWB+CHASSI	2	
	23	LPSP2608Z	SCREW	REAR+IC BKT	1	
	24	SDSP2606Z	SCREW	REAR BKT+ANT.CO	1	
	25	VKZ4333-002	SPECIAL SCREW	11PIN CONECTOR+	2	
	26	SDST2606Z	SCREW	CHASSIS+TUNER P	1	
	27	SDSP2606Z	SCREW	REAR PANEL+TOP	2	
	28	SSST2606Z	SCREW	TUNER HOLDER+CH	1	
	29	SDST2606Z	SCREW		1	
	30	VMP0029-030	ANT CORD		1	
	31	VMP3262-001	CORD ASS'Y		1	
	32	VMP3263-002	8P CORD ASS'Y		1	
	34	VJG1261-001	FRONT CHASSIS		1	
	35	VKS3661-001	LOCK LEVER		1	
	36	VKL7686-001	RLS KNOB BKT		1	
	37	VKW5108-001	TORSION SPRING	FOR LOCK LEVER	1	
	38	VXP5139-001	RLS KNOB		1	
	39	VKW3001-298	COMP.SPRING		1	
	40	SDSF2006Z	SCREW	F.CHASSIS+L.BKT	2	
	41	VKY3128-001	STOP SPRING	FOR LOCK LEVER	1	
	42	SDSF2006Z	SCREW	STOP SPRING	1	
	45	VJC4145-002SS	CASSETTE LID		1	
	47	VJC4146-023NEW	LID PLATE		1	
	48	VKW4947-003	DOOR SPRING		1	
	49	SPSN1755N	MINI SCREW	F.CHASSIS+C.PWB	4	
	50	VJG1262-001	FRONT PANEL		1	
	51	VJK3633-001	RING LENS		1	
	52	VJK2189-001	FINDER A		1	
	53	VXP1002-001	PRESET BUTTON A		1	
	54	VXP1003-001	PRESET BUTTON B		1	
	55	VXP3630-001	REL BUTTON		1	
	56	VXP3631-001	BUTTON A	DISP/INFO	1	
	57	VXP3632-001	BUTTON B	SCAN/SUB	1	
	58	VDL3463-001V	VOL KNOB ASS'Y		1	
	60	VXP5227-001	RESET BUTTON		1	
	61	VJG1263-001	REAR COVER		1	

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX
	62	SPSN1780M	MINI SCREW	FRONT+REAR	6	
	63	VJK2188-001	FINDER B		1	
	64	VYN3463-001SA	NAME PLATE		1	
	65	VND4971-001	CAUTION LABEL		1	
	71	VMZ0122-001	INTER CONNECTOR		1	
	72	VJK3632-001	LCD LENS		1	
	73	VKL7685-001	LCD CASE		1	
	74	VKS3660-001	LENS CASE		1	
	75	VMA4586-002	EARTH PLATE		1	
	76	VKL7687-001	IC BRACKET		1	
	77	VMA4512-001	INSULATOR	CP991 PROTECTER	1	

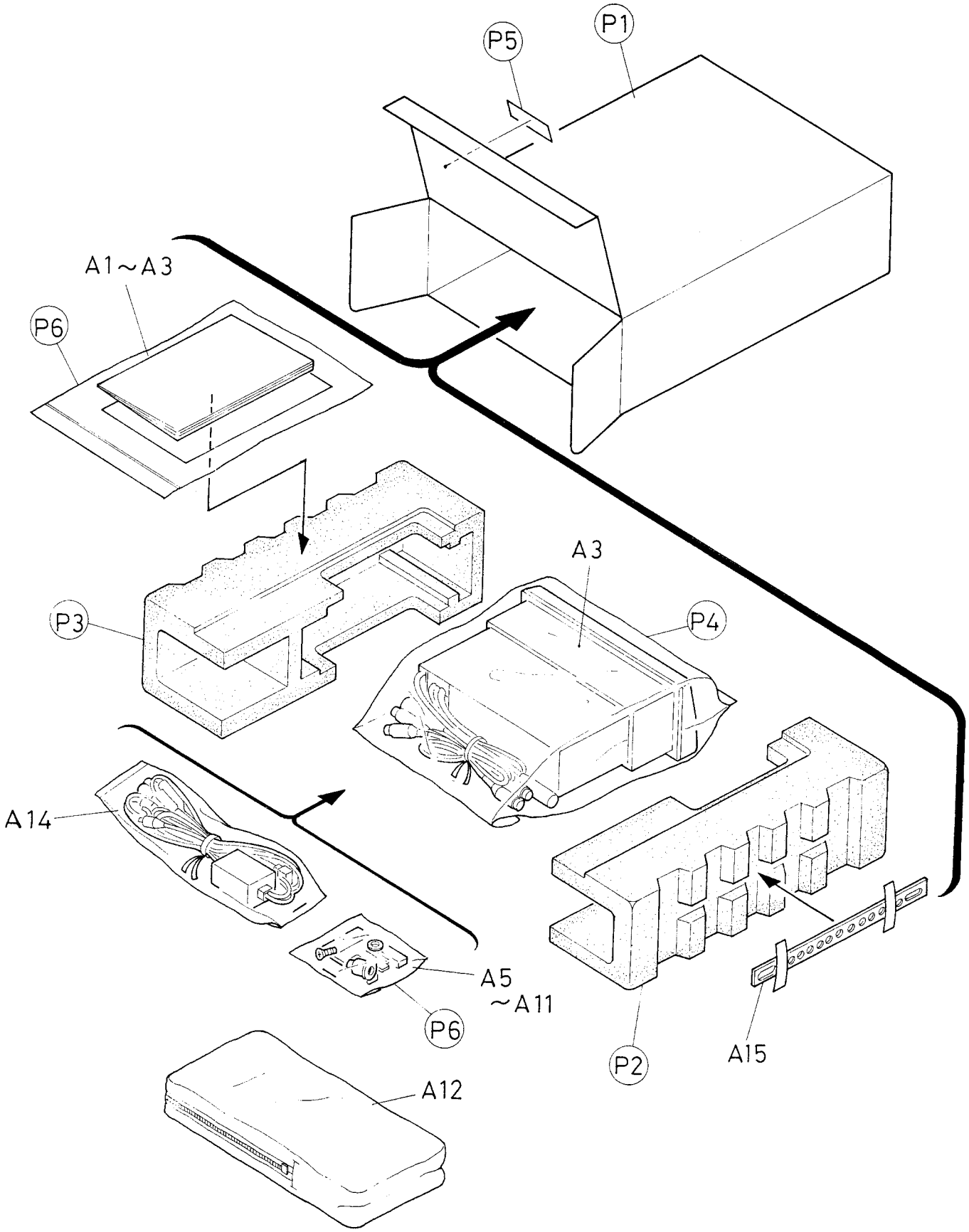
9. EXPLODED VIEW OF MECHANISM COMPONENT PARTS AND PARTS LIST



⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX
	1	195001501T	CHASSIS ASS'Y		1	
	2	195003501T	HEAD PANEL ASSY		1	
	3	19500305T	P.R.ACTUATOR		1	
	4	19500306T	P.R.SPRING		1	
	5	19500307T	P.R.SLIDE OLSTE		1	
	6	19500308T	TAPE GUIDE		1	
	7	19500310T	HEAD BASE		1	
	8	19500311T	HEAD SPRING PLA		1	
	9	62010745T	HEAD		1	
	13	195007301T	PINCH R. ARM		1	
	14	195007302T	PINCH R. ARM		1	
	17	19501301T	P.BRACKET		1	
	18	19501303T	SWITCH ACTUATOR		1	
	19	19501304T	SWITCH A.SPRING		1	
	20	19501302T	SWITCH FIX PLAT		1	
	21	64030402T	PUSH SWITCH		1	
	24	195008501T	M.G.PLATE		1	
	25	19500833T	FR GEAR GUIDE		1	
	26	195008305	REEL DESK		2	
	28	19500820T	REEL WING SPLIN		2	
	29	19500822T	REEL CAP		2	
	30	19500835T	P.C.BOARD ASS'Y		1	
	31	19500832T	MODE SWITCH		1	
	32	19500827T	MS GEAR		1	
	33	19500824T	D.GEAR		1	
	36	195012501T	CASSETTE LIFTER		1	
	37	19501205T	P.S.ACTUAROR		1	
	38	19501207T	P.S.SPRING		1	
	39	19501204T	PACK SLIDER		1	
	40	19501209T	CASSETTE CASE		1	
	41	18400875T	CUSSHION RUBBER		1	
	44	195004501T	LORDING PLATE A		1	
	45	19500404T	H.P PLATE ASS'Y		1	
	46	19500405T	H.P OUSH BAR		1	
	49	19500501T	MAIN PLATE		1	
	50	19500503T	P DIRECTION ACT		1	
	53	195010302T	MAIN MOTOR ASSY		1	
	54	195009301T	SUB MOTOR ASS'Y		1	
	55	19501401T	MOTOR CONNECT W		1	
	56	19501403T	WIRE CLUMPER		1	
	57	195006301T	F.R.PLATE ASS'Y		1	
	58	19500606T	F.R.PLATE GUIDE		1	
	59	19500605T	F.R.SPLING		1	
	62	195002301T	P.G.PLATE ASS'Y		1	
	63	19500207T	P.G.SPRING		1	
	64	19500208T	P.G.GUIDE ROLLE		1	
	66	195011301T	F.CAPSTAN ASS'Y		2	
	67	19501106T	FRICTION GEAR		2	
	68	19501108T	MAIN BELT		1	
	71	19500902T	B GEAR		1	
	72	19500117T	C GEAR		1	
	73	19500210T	CR DETECT PLATE		1	
	74	19500211T	TG CONT. PLATE		1	
	75	19500212T	TG CONT. PLATE		1	

⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX
	76	19500505T	REVERSE GEAR		1	
	77	19500506T	RG SPRING		1	
	78	19500607T	LEAD FIXTURE S		1	
	79	19500118T	TG GEAR P		1	
	80	19500120T	TG GEAR F		1	
	81	19500121T	FIX GEAR		1	
	82	19501002T	MIDDL PULLY		1	
	200	9C0120203T	SCREW	M2 X 2	1	
	201	9C0420303T	S TAPPING SCREW	M2 X 3	5	
	202	9W0250040T	POLY WASHER		4	
	203	9F2220131T	ADJUST SCREW	FOR HEAD	2	
	204	9W0630060T	HL CUT WASHER		2	
	205	9P0226041T	TAMS SCREW	M2.6 X 4	1	
	206	9E0100152T	E RING	S1.5	1	
	207	9P0220031T	TAMS SCREW		4	
	208	9W0225010T	P.WASHER CUT		1	
	209	9W0120050T	WASHER		2	
	210	9W0710046T	LUMILER WASHER		2	
	211	9W0220020T	CUT WASHER		1	
	212	9W0620010T	CUT WASHER		1	

10. PACKING ILLUSTRATION AND PARTS LIST



⚠	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX
	A 1	VNN3463-291	INSTRUCTIONS		1	
	A 2	VND3085-001	WARRANTY CARD		1	
	A 3	VND4342-00N	IDENTITY CARD		1	
	A 5	VKZ4027-002	PLUG NUT		1	
	A 6	VKH4871-001	MOUNT BOLT		1	
	A 7	VKZ4328-001	LOCK NUT	FOR M5	1	
	A 8	WNS5000Z	WASHER		1	
	A 9	VKY3124-001	SIDE SPRING		2	
	A 10	SSSP4006Z	SCREW	FOR SIDE SPRING	4	
	A 11	VKL7701-001	HOOK		2	
	A 12	VJB3039-001	SOFT CASE		1	
	A 13	VKL3732-015	MOUNTING SLEEVE		1	
	A 14	VMC0014-136	11PIN CORD ASS'		1	
	A 15	VKL5460-001	STAY		1	
	P 1	VPC3463-001	CARTON		1	
	P 2	VPH1581-002	CUSHION(L)		1	
	P 3	VPH1582-002	CUSHION(R)		1	
	P 4	VPE3022-001	POLY BAG	FOR SET	1	
	P 5	VND3046-001	SERIAL TICKET	FOR CARTON	1	
	P 6	QPGB017-02404	POLY BAG	INSTRUCTIONS	1	
	P 7	QPGA008-01205	POLY BAG	SCREW KIT 1	1	